Diploma in Engineering

Handbook

QUT

| Year | 2018 |
|--|--|
| QUT code | EN02 |
| | EINUZ |
| CRICOS | 086329G |
| Duration (full-time international) | 1 year |
| OP | 14 |
| Rank | 68 |
| International fee (indicative) | 2018: \$13,790 per study period (48 credit points) based on four units |
| Total credit points | 96 |
| Credit points full-time sem. | 48 |
| Course Coordinator | Dr Annetta Spathis (annetta.spathis@qut.edu .au) |
| Discipline Coordinator | |

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 5.5 |
| Listening | 5.0 |
| Reading | 5.0 |
| Writing | 5.0 |
| Speaking | 5.0 |

Overview

The Diploma in Engineering, which has intakes for international students in February, June and October, is equivalent to the first year of the Bachelor of Enginering. In this program, students study six first year faculty core units as well as two units of Communication which have been designed to support their other core units. Students who successfully complete these units earn full academic credit for eight units towards their degree. Graduates articulate to the second year of the Bachelor of Engineering. Small lectures and tutorials, additional workshops and the support of Language and Welfare Advisers provide an excellent learning environment.

Entry Requirements -Academic

Successful completion of senior high school with the required grades. Students can find more detailed country specific entry requirements at the following web site:

http://www.qut.edu.au/international/applyi ng

English Language Requirements

Queensland Senior English (Low Achievement) or IELTS 5.5 with no subscore less than 5.0 or TOEFL iBT Overall score of 69 (at least 18 in writing and reading and 17 or more in listening and speaking) or TOEFL 525 (paper) or TOEFL 193 (CBT) or equivalent, or successful completion of the EAP program. (N.B. Students should also check visa requirements).

Progression

Requirements for progression to the second year of the QUT Bachelor of Engineering program:

i) fulfil the Diploma course requirements,ii) achieve a minimum GPA of 4.0

Course Completion

Students must obtain at least a grade of 4 (Pass) or better in all units.

Abbreviation

DipEng

Sample Structure

| Code | Title |
|------------|---|
| Semester 1 | |
| EGD113 | Energy in Engineering Systems |
| EGD121 | Engineering Mechanics |
| EGD125 | Introductory Engineering Mathematics |
| QCD110 | Academic Communication 1 |
| Semester 2 | |
| EGD120 | Foundations of Electrical Engineering |
| EGD126 | Engineering Computation |
| EGD270 | Civil Engineering Materials |
| QCD210 | Academic Communication 2 |
| | |

Semesters

- Semster One
- <u>Semester Two</u>
- Semester Three
- Please note: The units offered under the 3-Sem Diploma are subject to availability

| Code | Title |
|-------------|--|
| Semster One | |
| EGD113 | Energy in Engineering Systems |
| EGD125 | Introductory Engineering Mathematics |
| QCD110 | Academic Communication 1 |

Diploma in Engineering

| Semester Two | | |
|--|---|--|
| EGD120 | Foundations of Electrical Engineering | |
| EGD121 | Engineering Mechanics | |
| QCD210 | Academic Communication 2 | |
| Semester Three | | |
| EGD126 | Engineering Computation | |
| EGD270 | Civil Engineering Materials | |
| Please note: The units offered under the 3-Sem Diploma are subject to availability | | |



QUT

Diploma in Information Technology

Handbook

| Year | 2018 |
|--|---|
| QUT code | IT10 |
| CRICOS | 081616G |
| Duration (full-time international) | 1 year |
| OP | 14 |
| Rank | 68 |
| International fee (indicative) | 2018: \$9,970 per study period (48 credit points) based on four units |
| Total credit points | 96 |
| Credit points full-time sem. | 48 |
| Course Coordinator | Dr Annetta Spathis (annetta.spathis@qut.edu .au) |
| Discipline Coordinator | |

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 5.5 |
| Listening | 5.0 |
| Reading | 5.0 |
| Writing | 5.0 |
| Speaking | 5.0 |

QUT International College

International students may upgrade to the QUT Bachelor of Information Technology through QUT International College at our Kelvin Grove campus.

The University Diploma in Information Technology is equivalent to two semesters of the Bachelor of Information Technology degree with a total of 96 credit points (48 standard credit points for a full-time semester).

In the University Diploma program, students study six degree core units as well as two English language units that have been designed to support the other core units.

Progression to the Bachelor of Information Technology

Students who successfully complete these eight units with a grade point average of 4 (on a 7-point scale) and obtain a grade of at least 4 in Professional Communication 2 are given two semesters full-time advanced standing towards their degree and are guaranteed a place in the Bachelor of Information Technology.

Students who complete the University Diploma in Information Technology are also eligible for 96 credit points towards the Bachelor of Corporate Systems Management and Bachelor of Games and Interactive Entertainment.

Sample Structure

| Code | Title |
|--------------|-------------------------------------|
| Semester One | |
| ITD101 | Impact of IT |
| ITD104 | Building IT Systems |
| ITD122 | Modelling Information Systems |
| QCD110 | Academic |

| | Communication 1 |
|--------------|--|
| Semester Two | |
| ITD102 | Computer Technology Fundamentals |
| ITD103 | Designing for IT |
| ITD121 | Programming Principles |
| QCD210 | Academic Communication 2 |

Semesters

- Semester One
- Semester Two
- Semester Three
- Please note: The units offered are subject to availability

| Code | Title |
|--|--|
| Semester One | |
| ITD101 | Impact of IT |
| ITD104 | Building IT Systems |
| QCD110 | Academic Communication 1 |
| Semester Two | |
| ITD102 | Computer Technology Fundamentals |
| ITD121 | Programming Principles |
| QCD210 | Academic Communication 2 |
| Semester Three | |
| ITD103 | Designing for IT |
| ITD122 | Modelling Information Systems |
| Please note: The units offered are subject to availability | |

QUT

Bachelor of Engineering (Honours)

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for all primary majors in this course.

Complementary Studies

You have the opportunity to undertake a second major or two minors. A second major is a set of eight units (96 credit points) in the same discipline. A minor is a set of four units (48 credit points) in the same discipline. You will select your primary major, second major and/or minors after the completion of your first year.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Course Design

Your QUT Bachelor of Engineering (Honours) degree consists of 384 credit points (32 units) arranged as follows:

(a) First Year: Four (4) core units 48cp + two (2) Discipline Foundation units 24cp + two (2) option units 24cp (96 credit points)

(b) Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

Available Majors are:

- Civil
- Computer and Software Systems
- Electrical
- · Electrical and Aerospace
- Mechatronics
- Mechanical
- · Medical, or • Process

(c) Complementary Studies: 1 x Second Major (8 unit set) or 2 x Minor (4 unit set each)from the options specified for your chosen major. (96 credit points)

Pathways to Further Study

The (EN01) Bachelor of Engineering (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs.

| Code | Title |
|-----------------|--|
| Year 1 - Semest | er 1 |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours)

| OR | |
|--|-------------------------------|
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 | Engineering Computation |
| Plus 36cp from ONE of the Engineer Foundation Strands | |

If you're intended to select Medical Engineering Major, please refer your first year study plan at <u>Medical major 1st</u> <u>Year - July Entry</u>

| Code | Title | |
|---|--|--|
| Year 1 - Semest | er 2 | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| PVB101 | Physics of the Very Large | |
| PVB101 is the substitute unit of EGB113 in semester 2 | | |
| Plus select 12cp (1 unit) from ONE of the Engineering Foundation Strands | | |
| Year 2 - Semest | er 1 | |
| MZB126 | Engineering Computation | |
| EGB111 | Foundation of Engineering Design | |
| Plus select 24cp (2 units) from ONE of the Engineering Foundation Strands | | |



| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Brian Lee |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Civil) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major(192 credit points): one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp
- Complementary studies(96 credit points): one x second major or two x minor.

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major(192 credit points): one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp
- Complementary studies(96 credit points): one x second major or two x minor .

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

| Code | Title |
|---------------------|--|
| Year 1 - Semester 1 | |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering |

Bachelor of Engineering (Honours) (Civil)

| | Mathematics |
|---|-------------------------------|
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 | Engineering Computation |
| Plus 36cp from ONE of the Engineering Foundation Strands | |

Semesters

- Year 2, Semester 1
- . Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 Year 4, Semester 2

| Code | Title | | |
|----------------------|---|--|--|
| Year 2, Semeste | r 1 | | |
| EGB270 | Civil Engineering Materials | | |
| EGB272 | Traffic and Transport Engineering | | |
| EGB275 | Structural Mechanics | | |
| EGB371 | Engineering Hydraulics | | |
| Year 2, Semeste | r 2 | | |
| EGB273 | Principles of Construction | | |
| EGB373 | Geotechnical Engineering | | |
| EGB376 | Steel Design | | |
| EGH471 | Advanced Water Engineering | | |
| Year 3, Semeste | r 1 | | |
| EGB375 | Design of Concrete Structures | | |
| EGH473 | Advanced Geotechnical Engineering | | |
| 2nd Major/Minor | unit | | |
| 2nd Major/Minor | unit | | |
| Year 3, Semeste | r 2 | | |
| EGH404 | Research in Engineering Practice | | |
| EGH472 | Advanced Highway and Pavement Engineering | | |
| EGH475 | Advanced Concrete Structures | | |
| 2nd Major/Minor unit | | | |
| Year 4, Semester 1 | | | |
| EGH400-1 | Research Project 1 | | |
| 2nd Major/Minor unit | | | |
| 2nd Major/Minor | 2nd Major/Minor unit | | |

2nd Major/Minor unit

| | Year 4, Semester | 'ear 4, Semester 2 | |
|----------------------|------------------|---|--|
| | EGH400-2 | Research Project 2 | |
| | EGH479 | Advances in Civil Engineering Practice | |
| 2nd Major/Minor unit | | unit | |

2nd Major/Minor unit

Semesters

- Year 2, Semester 2
 Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2 • Year 5, Semester 1

| • <u>Year 5, Semester 1</u> | | |
|-----------------------------|---|--|
| Code | Title | |
| Year 2, Semester | | |
| EGB273 | Principles of Construction | |
| EGB275 | Structural Mechanics | |
| EGB373 | Geotechnical Engineering | |
| 2nd Major/Minor | unit | |
| Year 3, Semester | r 1 | |
| EGB272 | Traffic and Transport Engineering | |
| EGB270 | Civil Engineering Materials | |
| EGB371 | Engineering Hydraulics | |
| 2nd Major/Minor | unit | |
| Year 3, Semester | r 2 | |
| EGB376 | Steel Design | |
| EGH471 | Advanced Water Engineering | |
| EGH472 | Advanced Highway and Pavement Engineering | |
| 2nd Major/Minor unit | | |
| Year 4, Semester | r 1 | |
| EGB375 | Design of Concrete Structures | |
| EGH404 | Research in Engineering Practice | |
| EGH473 | Advanced Geotechnical Engineering | |
| 2nd Major/Minor | unit | |
| Year 4, Semester | | |
| EGH475 | Advanced Concrete Structures | |
| EGH479 | Advances in Civil Engineering Practice | |
| EGH400-1 | Research Project 1 | |
| 2nd Major/Minor unit | | |
| Year 5, Semester | r 1 | |
| EGH400-2 | Research Project 2 | |

2nd Major/Minor unit

- 2nd Major/Minor unit
- 2nd Major/Minor unit

The following Second Majors are highly recommended for students undertaking the Civil Major:

- Construction Engineering Second Major (EN01SMJ-CONSTRU)
- Environmental Engineering Second Major (EN01SMJ-ENVIRNL)

Title

- Structural Engineering Second Major (EN01SMJ-STRUENG)
- Transport Engineering Second Major (EN01SMJ-TRANSEN)

NOTE: Code

These Second Majors are listed first, with other available Second Majors listed below these.

Study Area Description

For more details and description on this minor please refer to the EN01 Complementary Studies at the Faculty's Student Zone under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on statistical science (suggested pathway: MXB101, MXB107, MXB202, MXB242), mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- Unit List
- <u>SUGGESTED PATHWAYS</u>
- <u>Statistical Science</u>
- Mathematical and Statistical Modelling
- Applied Mathematics
- Simulation Science
- Computation, modelling and simulation

| Unit List | | |
|---|--|--|
| Code | Title | |
| Select 2 units (24 credit points) from Unit Option List 1: | | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and | |



Bachelor of Engineering (Honours) (Civil)

| | Two Variables | |
|--|--|--|
| MXB106 | Linear Algebra and Differential Equations | |
| MXB107 | Introduction to Statistical Modelling | |
| Select 2 units (24 credit points) from Unit Option List 2: | | |
| MXB202 | Advanced Calculus | |
| MXB221 | Ordinary Differential Equations | |
| MXB232 | Introduction to Operations Research | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| MXB242 | Regression and Design | |
| MXB261 | Modelling and Simulation Science | |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling 2 |

| Applied Mathematics | |
|---------------------|--|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential Equations |

| Simulation Science | |
|--------------------|-----------------|
| Code | Title |
| MXB101 | Probability and |

| | Stochastic Modelling 1 |
|--------|--|
| MXB106 | Linear Algebra and Differential Equations |
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |

| Computation, modelling and simulation | | |
|---------------------------------------|--|--|
| Code | Title | |
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB221 | Ordinary Differential Equations | |
| MXB261 | Modelling and Simulation Science | |

QUT

Bachelor of Engineering (Honours) (Computer and Software Systems)

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Wayne Kelly |
| | w.kelly@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|---|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Computer and Software Systems) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

| Code | Title |
|-----------------|--|
| Year 1 - Semest | er 1 |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours) (Computer and Software Systems)

| OR | | |
|--|-------------------------------|--|
| MXB161 | Computational Explorations | |
| Year 1 - Semester 2 | | |
| MZB126 | Engineering Computation | |
| Plus 36cp from ONE of the Engineering Foundation Strands | | |

Please note -

This is an example study plan for students on a relatively standard progression, however, depending on which units and second majors/minors you choose, you may need to deviate from that plan. Please contact your Subject Area Coordinator **Dr Wayne Kelly**, Email: <u>w.kelly@qut.edu.au</u> if you wish to discuss your study plan options.

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title | |
|---|--|--|
| Year 2, Semester 1 | | |
| EGB240 | Electronic Design | |
| CAB201 | Programming Principles | |
| 2nd Major/Minor un | it | |
| 2nd Major/Minor un | it | |
| Year 2, Semester 2 | | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB242 | Signal Analysis | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor un | it | |
| Year 3, Semester 1 | | |
| Intermediate Softwa | are Unit Option | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor un | | |
| 2nd Major/Minor un | it | |
| Year 3, Semester 2 | | |
| CAB403 | Systems Programming | |
| Intermediate Electri | cal Unit Option | |
| Intermediate Electrical or Software Unit Option | | |
| EGH404 | Research in Engineering Practice | |
| Year 4, Semester 1 | | |
| Advanced Electrica | Unit Option | |
| EGH400-1 | Research Project 1 | |

| EGH456 | Embedded Systems | |
|---|----------------------------|--|
| 2nd Major/Minor unit | | |
| Year 4, Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH455 | Advanced Systems Design | |
| Advanced Electrical or Software Unit Option | | |
| Advanced Software Unit Option | | |

If you intend to select the Civil Engineering Major, please refer your first year study plan at <u>Civil major 1st</u> <u>Year - July Entry</u>.

OR

If you intend to select the Medical Engineering Major, please refer your first year study plan at <u>Medical major 1st</u> <u>Year - July Entry</u>.

| Code | Title | |
|------------------------|--|--|
| Year 1 - Semest | er 2 | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| EGB113 | Energy in Engineering Systems | |
| OR | | |
| PVB101 | Physics of the Very Large | |
| EGB123 | Civil Engineering Systems | |
| OR | | |
| Foundation Unit Option | | |
| Year 2 - Semest | er 1 | |
| MZB126 | Engineering Computation | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| EGB120 | Foundations of Electrical Engineering | |
| OR | | |
| Foundation Unit | Option | |

Please note -

This is an example study plan for students on a relatively standard progression, however, depending on which units and second majors/minors you choose, you may need to deviate from that plan. Please contact your Subject Area Coordinator **Dr Wayne Kelly**, Email: <u>w.kelly@qut.edu.au</u> if you wish to discuss your study plan options.

Semesters

- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Year 5, Semester 1

| Code | Title | |
|--|--|--|
| Year 2, Semester 2 | | |
| CAB201 | Programming Principles | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB242 | Signal Analysis | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 1 | | |
| EGB240 | Electronic Design | |
| Intermediate Software Unit Option | | |
| Intermediate Software Unit Option | | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 2 | | |
| CAB403 | Systems Programming | |
| Intermediate Electri | cal Unit Option | |
| 2nd Major/Minor un | it | |
| 2nd Major/Minor un | it | |
| Year 4, Semester 1 | | |
| EGH404 | Research in Engineering Practice | |
| EGH456 | Embedded Systems | |
| Advanced Electrical Unit Option | | |
| Advanced Software Unit Option | | |
| Year 4, Semester 2 | | |
| EGH400-1 | Research Project 1 | |
| EGH455 | Advanced Systems Design | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor un | | |
| 2nd Major/Minor un Year 5, Semester 1 | | |
| - | Research Project 2 | |
| Year 5, Semester 1 | Research Project 2 | |
| Year 5, Semester 1 EGH400-2 | Research Project 2 I Unit Option | |

Study Area Description

For more details and description on this minor please refer to the <u>EN01</u> <u>Complementary Studies</u> at the Faculty's <u>Student Zone</u> under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on **statistical**



Bachelor of Engineering (Honours) (Computer and Software Systems)

science (suggested pathway: MXB101, MXB107, MXB202, MXB242),

mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- Unit List
- SUGGESTED PATHWAYS
- Statistical Science
- Mathematical and Statistical Modelling
- Applied Mathematics
- Simulation Science
- <u>Computation, modelling and</u> <u>simulation</u>

Unit List

| Code | Title |
|---|-------|
| Select 2 units (24 credit points) from Unit Option List 1: | |

| MXB101 | Probability and Stochastic Modelling 1 | |
|--|--|--|
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| MXB107 | Introduction to Statistical Modelling | |
| Select 2 units (24 credit points) from Unit Option List 2: | | |
| MXB202 | Advanced Calculus | |
| MXB221 | Ordinary Differential Equations | |
| MXB232 | Introduction to Operations Research | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| | | |
| MXB242 | Regression and Design | |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |

| MXB107 | Introduction to Statistical Modelling |
|--------|--|
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling 2 |

| Applied Mathematics | |
|---------------------|--|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential Equations |

| Simulation Science | |
|--------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB106 | Linear Algebra and Differential Equations |
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |

| Computation, modelling and simulation | |
|---------------------------------------|--|
| Code | Title |
| MXB103 | Introductory Computational Mathematics |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB261 | Modelling and Simulation Science |



| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Aaron Mcfadyen |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Electrical and Aerospace) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

| Code | Title |
|---------------------|--|
| Year 1 - Semester 1 | |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours) (Electrical and Aerospace)

| OR | |
|--|-------------------------------|
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 | Engineering Computation |
| Plus 36cp from ONE of the Engineering Foundation Strands | |

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title | |
|---|--|--|
| Year 2, Semester | 1 | |
| EGB240 | Electronic Design | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB242 | Signal Analysis | |
| EGB243 | Aircraft Systems and Flight | |
| Year 2, Semester 2 | 2 | |
| EGB345 | Control and Dynamic Systems | |
| EGB346 | Unmanned Aircraft Systems | |
| Intermediate Electrical & Aerospace Unit Option | | |
| 2nd Major/Minor un | nit | |
| Year 3, Semester | 1 | |
| EGB349 | Systems Engineering and Design Project | |
| Advanced Electrical & Aerospace Unit Option | | |
| 2nd Major/Minor u | nit | |
| 2nd Major/Minor un | nit | |
| Year 3, Semester 2 | 2 | |
| EGH445 | Modern Control | |
| EGH450 | Advanced Unmanned Aircraft Systems | |
| 2nd Major/Minor u | nit | |
| EGH404 | Research in Engineering Practice | |
| Year 4, Semester | 1 | |
| EGH400-1 | Research Project 1 | |
| EGH446 | Autonomous Systems | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 2 | 2 | |
| EGH400-2 | Research Project 2 | |
| Advanced Electrica Option | al & Aerospace Unit | |

2nd Major/Minor unit 2nd Major/Minor unit

If you intend to select the Civil Engineering Major, please refer your first year study plan at Civil major 1st Year - July Entry.

OR

If you intend to select the Medical Engineering Major, please refer your first year study plan at Medical major 1st Year - July Entry.

| Code | Title | |
|---------------------|--|--|
| Year 1 - Semester 2 | | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| EGB113 | Energy in Engineering Systems | |
| OR | | |
| PVB101 | Physics of the Very Large | |
| EGB123 | Civil Engineering Systems | |
| OR | | |
| Foundation Unit | Option | |
| Year 2 - Semest | er 1 | |
| MZB126 | Engineering Computation | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| EGB120 | Foundations of Electrical Engineering | |
| OR | | |

Foundation Unit Option

Semesters

- Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Year 5, Semester 1

| Code | Title |
|----------------------|-------------------------------------|
| Year 2, Semester 2 | |
| CAB202 | Microprocessors and Digital Systems |
| EGB242 | Signal Analysis |
| 2nd Major/Minor unit | |
| 2nd Major/Minor unit | |

| Year 3, Semester | 1 | |
|--|---|--|
| EGB240 | Electronic Design | |
| EGB243 | Aircraft Systems and Flight | |
| 2nd Major/Minor u | nit | |
| 2nd Major/Minor un | nit | |
| Year 3, Semester 2 | | |
| EGB345 | Control and Dynamic Systems | |
| EGB346 | Unmanned Aircraft Systems | |
| Intermediate Electrical & Aerospace Unit Option | | |
| 2nd Major/Minor unit | | |
| Year 4, Semester | 1 | |
| EGB349 | Systems Engineering and Design Project | |
| EGH404 | Research in Engineering Practice | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor u | nit | |
| | _ | |
| Year 4, Semester 2 | 2 | |
| Year 4, Semester 2 EGH400-1 | 2 Research Project 1 | |
| | | |
| EGH400-1 | Research Project 1 | |
| EGH400-1 EGH445 EGH450 | Research Project 1 Modern Control Advanced Unmanned Aircraft | |
| EGH400-1 EGH445 EGH450 Advanced Electrica | Research Project 1 Modern Control Advanced Unmanned Aircraft Systems al & Aerospace Unit | |
| EGH400-1 EGH445 EGH450 Advanced Electrica Option | Research Project 1 Modern Control Advanced Unmanned Aircraft Systems al & Aerospace Unit | |
| EGH400-1 EGH445 EGH450 Advanced Electrica Option Year 5, Semester | Research Project 1 Modern Control Advanced Unmanned Aircraft Systems al & Aerospace Unit | |
| EGH400-1 EGH445 EGH450 Advanced Electrica Option Year 5, Semester EGH400-2 EGH446 | Research Project 1 Modern Control Advanced Unmanned Aircraft Systems al & Aerospace Unit Research Project 2 Autonomous | |

Study Area Description

For more details and description on this minor please refer to the EN01 Complementary Studies at the Faculty's Student Zone under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on **statistical** science (suggested pathway: MXB101, MXB107, MXB202, MXB242), mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

Bachelor of Engineering (Honours) (Electrical and Aerospace)

In this list

- Unit List
- SUGGESTED PATHWAYS
- Statistical Science
- Mathematical and Statistical Modelling
- <u>Applied Mathematics</u>
- Simulation Science
- <u>Computation, modelling and</u>
 <u>simulation</u>

Unit List Code

CodeTitleSelect 2 units (24 credit points) from UnitOption List 1:

| Option List 1. | | |
|--|--|--|
| MXB101 | Probability and Stochastic Modelling 1 | |
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| MXB107 | Introduction to Statistical Modelling | |
| Select 2 units (24 credit points) from Unit Option List 2: | | |
| MXB202 | Advanced Calculus | |
| MXB221 | Ordinary Differential Equations | |
| MXB232 | Introduction to Operations Research | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| MXB242 | Regression and Design | |
| MXB261 | Modelling and | |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |

| MXB105 | Calculus of One and Two Variables |
|--------|--|
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling 2 |

| Applied Mathematics | |
|---------------------|---|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential Equations |

| Simulation Science | |
|--------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB106 | Linear Algebra and Differential Equations |
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |

| Computation, modelling and simulation | |
|---------------------------------------|--|
| Code | Title |
| MXB103 | Introductory Computational Mathematics |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB261 | Modelling and Simulation Science |



| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Jacob Coetzee 3138 2865 jacob.coetzee@qut.edu.a u |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Electrical) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

| Code | Title |
|-----------------|--|
| Year 1 - Semest | er 1 |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours) (Electrical)

| UK | | |
|--|-------------------------------|--|
| MXB161 | Computational Explorations | |
| Year 1 - Semester 2 | | |
| MZB126 | Engineering Computation | |
| Plus 36cp from ONE of the Engineering Foundation Strands | | |

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- ٠
- Year 3, Semester 2 Year 4, Semester 1 ٠
- Year 4, Semester 2 •
- Intermediate Electrical Unit Options ٠ List
- Advanced Electrical Unit Options ٠ <u>List</u>

| Code | Title | |
|---|--|--|
| Year 2, Semester | 1 | |
| EGB241 | Electromagnetics and Machines | |
| EGB242 | Signal Analysis | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB240 | Electronic Design | |
| Year 2, Semester | 2 | |
| Intermediate Elect | rical Option Unit[1] | |
| Intermediate Elect | rical Option Unit[2] | |
| | rical Option Unit[3] | |
| 2nd Major/Minor u | | |
| Year 3, Semester | | |
| EGB340 | Design and Practice | |
| Advanced Electric | • | |
| | al Option Unit [2]or | |
| 2nd Major/Minor u | | |
| 2nd Major/Minor u | nit[3] | |
| Year 3, Semester | 2 | |
| Advanced Electric | al Option Unit[3] | |
| Advanced Electric | al Option Unit[4] | |
| 2nd Major/Minor unit[2] or Advanced Electrical Option Unit [2] | | |
| EGH404 | Research in Engineering Practice | |
| Year 4, Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| 2nd Major/Minor unit[4] | | |
| 2nd Major/Minor unit[5] | | |
| 2nd Major/Minor unit[6] | | |
| Year 4, Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| Advanced Electrical Option Unit[5] | | |
| 2nd Major/Minor unit[7] | | |
| | | |

| 2nd Major/Minor u | ınit[8] | |
|---|--|--|
| Intermediate Elec | trical Unit Options List | |
| EGB341 | Energy Supply and Delivery | |
| EGB342 | Telecommunications and Signal Processing | |
| EGB345 | Control and Dynamic Systems | |
| EGB348 | Electronics | |
| Advanced Electrical Unit Options List | | |
| EGH441 | Power System Modelling | |
| EGH442 | RF Techniques and Applications | |
| EGH443 | Advanced Telecommunications | |
| EGH444 | Digital Signals and Image Processing | |
| EGH445 | Modern Control | |
| EGH446 | Autonomous Systems | |
| EGH448 | Power Electronics | |
| EGH449 | Advanced Electronics | |
| The following unit options have been discontinued, but will still count towards | | |

this minor:

EGH440 Power Systems Analysis (disc 31/12/2018)

If you intend to select the Civil Engineering Major, please refer your first year study plan at Civil major 1st Year - July Entry.

OR

If you intend to select the Medical Engineering Major, please refer your first year study plan at Medical major 1st Year - July Entry.

| Code | Title | |
|-----------------|--|--|
| Year 1 - Semest | ter 2 | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| EGB113 | Energy in Engineering Systems | |
| OR | | |
| PVB101 | Physics of the Very Large | |
| EGB123 | Civil Engineering Systems | |
| OR | | |

| Foundation Unit Option | | |
|------------------------|--|--|
| Year 2 - Semest | er 1 | |
| MZB126 | Engineering Computation | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| EGB120 | Foundations of Electrical Engineering | |
| OR | | |
| Foundation Unit Option | | |

Please refer to the Engineering Honours Majors page under "Your Course" at the Faculty's Student Zone for more details, including a course diagram, on the Electrical engineering major.

Semesters

- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
 Year 4, Semester 2
- Year 5, Semester 1 Intermediate Electrical Unit Options
- List Advanced Electrical Unit Options • List

| Code | Title | |
|---|--|--|
| Year 2, Semester 2 | | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB242 | Signal Analysis | |
| 2nd Major/Minor Unit[1] | | |
| 2nd Major/Minor L | Init[2] | |
| Year 3, Semester | 1 | |
| EGB240 | Electronic Design | |
| EGB241 | Electromagnetics and Machines | |
| 2nd Major/Minor L | Init[3] | |
| 2nd Major/Minor L | Init[4] | |
| Year 3, Semester | 2 | |
| Intermediate Elect | rical Option Unit[1] | |
| Intermediate Elect | rical Option Unit[2] | |
| Intermediate Elect | rical Option Unit[3] | |
| 2nd Major/Minor L | Init[5] | |
| Year 4, Semester | 1 | |
| EGB340 | Design and Practice | |
| EGH404 | Research in Engineering Practice | |
| Advanced Electrical Option Unit[1] | | |
| Advanced Electrical Option Unit[2] | | |
| Year 4, Semester | 2 | |
| EGH400-1 | Research Project 1 | |
| Advanced Electrical Option Unit[5] or 2nd Major/Minor unit[6] | | |
| Advanced Electrical Option Unit[3] | | |

Bachelor of Engineering (Honours) (Electrical)

Advanced Electrical Option Unit[4] Year 5, Semester 1 EGH400-2 **Research Project 2** Advanced Electrical Option Unit [5]or 2nd Major/Minor unit[6] 2nd Major/Minor unit[7] 2nd Major/Minor unit[8] Intermediate Electrical Unit Options List Energy Supply and EGB341 Delivery Telecommunications **EGB342** and Signal Processing Control and Dynamic **EGB345** Systems EGB348 Electronics Advanced Electrical Unit Options List Power System EGH441 Modelling RF Techniques and **EGH442** Applications Advanced **EGH443** Telecommunications **Digital Signals and EGH444** Image Processing **EGH445** Modern Control EGH446 Autonomous Systems **EGH448 Power Electronics EGH449** Advanced Electronics The following unit options have been

discontinued, but will still count towards this minor:

EGH440 Power Systems Analysis (disc 31/12/2018)

Study Area Description

For more details and description on this minor please refer to the EN01 **Complementary Studies** at the Faculty's Student Zone under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on statistical science (suggested pathway: MXB101, MXB107, MXB202, MXB242), mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- Unit List
- SUGGESTED PATHWAYS
- Statistical Science . Mathematical and Statistical

- Modelling
- Applied Mathematics
- <u>Simulation Science</u>
- Computation, modelling and • simulation

Unit List

Code Title Select 2 units (24 credit points) from Unit Option List 1: Probability and **MXB101** Stochastic Modelling Introductory **MXB103** Computational **Mathematics** Calculus of One and **MXB105** Two Variables Linear Algebra and **MXB106 Differential Equations** Introduction to **MXB107** Statistical Modelling Select 2 units (24 credit points) from Unit Option List 2: **MXB202** Advanced Calculus **Ordinary Differential MXB221** Equations Introduction to **MXB232 Operations Research** Probability and **MXB241** Stochastic Modelling 2 Regression and **MXB242** Design Modelling and **MXB261** Simulation Science

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and |

Stochastic Modelling 2

| Applied Mathematics | |
|---------------------|---|
| Code Title | |
| Coue | |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential Equations |

| Simulation Science | | |
|--------------------|--|--|
| Code | Title | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| MXB106 | Linear Algebra and Differential Equations | |
| MXB232 | Introduction to Operations Research | |
| MXB261 | Modelling and Simulation Science | |

| Computation, modelling and simulation | | |
|---------------------------------------|--|--|
| Code | Title | |
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB221 | Ordinary Differential Equations | |
| MXB261 | Modelling and Simulation Science | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=EN01&courseID=32719. CRICOS No.00213J



| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Professor Ted Steinberg |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

candidate for the degree of Bachelor of Engineering (Honours)(Mechanical) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

| Code | Title |
|-----------------|--|
| Year 1 - Semest | er 1 |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours) (Mechanical)

| OR | |
|--|-------------------------------|
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 | Engineering Computation |
| Plus 36cp from ONE of the Engineering Foundation Strands | |

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2 •
- ٠
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title | |
|-----------------------------|--|--|
| Year 2, Semester 1 | | |
| EGB210 | Fundamentals of Mechanical Design | |
| EGB211 | Dynamics | |
| EGB214 | Materials and Manufacturing | |
| EGB323 | Fluid Mechanics | |
| Year 2, Semester 2 | | |
| EGB314 | Strength of Materials | |
| EGB322 | Thermodynamics | |
| 2nd Major/Minor un | it option | |
| 2nd Major/Minor un | it option | |
| Year 3, Semester 1 | | |
| EGB316 | Design of Machine Elements | |
| EGB321 | Dynamics of Machines | |
| EGH414 | Stress Analysis | |
| 2nd Major/Minor un | it option | |
| Year 3, Semester 2 | | |
| EGH404 | Research in Engineering Practice | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |
| 2nd Major/Minor un | it option | |
| Year 4, Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| EGH421 | Vibration and Control | |
| 2nd Major/Minor un | it option | |
| 2nd Major/Minor unit option | | |
| Year 4, Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH420 | Mechanical Systems Design | |
| 2nd Major/Minor unit option | | |
| | 2nd Major/Minor unit option | |

If you intend to select the Civil Engineering Major, please refer your first year study plan at Civil major 1st Year - July Entry.

OR

If you intend to select the Medical Engineering Major, please refer your first year study plan at Medical major 1st Year - July Entry.

| Code | Title |
|------------------------|--|
| Year 1 - Semest | er 2 |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational Explorations |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB113 | Energy in Engineering Systems |
| OR | |
| PVB101 | Physics of the Very Large |
| EGB123 | Civil Engineering Systems |
| OR | |
| Foundation Unit | Option |
| Year 2 - Semest | er 1 |
| MZB126 | Engineering Computation |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| EGB120 | Foundations of Electrical Engineering |
| OR | |
| Foundation Unit Option | |

Semesters

- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
 Year 5, Semester 1

| Code | Title | |
|----------------------|--------------------------------------|--|
| Year 2, Semester 2 | | |
| EGB211 | Dynamics | |
| EGB314 | Strength of Materials | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 1 | | |
| EGB210 | Fundamentals of Mechanical Design | |

| EGB214 | Materials and | |
|----------------------|--|--|
| 505000 | Manufacturing | |
| EGB323 | Fluid Mechanics | |
| 2nd Major/Minor uni | t | |
| Year 3, Semester 2 | | |
| EGB322 | Thermodynamics | |
| 2nd Major/Minor uni | t | |
| 2nd Major/Minor uni | t | |
| 2nd Major/Minor uni | t | |
| Year 4, Semester 1 | | |
| EGB316 | Design of Machine Elements | |
| EGB321 | Dynamics of Machines | |
| EGH404 | Research in Engineering Practice | |
| EGH414 | Stress Analysis | |
| Year 4, Semester 2 | | |
| EGH400-1 | Research Project 1 | |
| EGH420 | Mechanical Systems Design | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |
| Year 5, Semester 1 | | |
| EGH400-2 | Research Project 2 | |
| EGH421 | Vibration and Control | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |

Semesters

• Year 2, Semester 2

Year 3, Semester 1

- Year 3, Semester 2
- Year 4, Semester 1
 Year 4, Semester 2
- Year 5, Semester 1

| Code | Title | |
|----------------------|--------------------------------------|--|
| Year 2, Semester 2 | | |
| EGB211 | Dynamics | |
| EGB322 | Thermodynamics | |
| 2nd Major/Minor uni | t | |
| 2nd Major/Minor uni | t | |
| Year 3, Semester 1 | | |
| EGB210 | Fundamentals of Mechanical Design | |
| EGB214 | Materials and Manufacturing | |
| EGB323 | Fluid Mechanics | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 2 | | |
| EGB314 | Strength of Materials | |
| EGH422 | Advanced Thermodynamics | |

QU

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=EN01&courseID=32727. CRICOS No.00213J

Bachelor of Engineering (Honours) (Mechanical)

| EGH423 | Fluids Dynamics | |
|----------------------|--|--|
| 2nd Major/Minor uni | it | |
| Year 4, Semester 1 | | |
| EGB316 | Design of Machine Elements | |
| EGB321 | Dynamics of Machines | |
| EGH404 | Research in Engineering Practice | |
| EGH414 | Stress Analysis | |
| Year 4, Semester 2 | | |
| EGH400-1 | Research Project 1 | |
| EGH420 | Mechanical Systems Design | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 5, Semester 1 | | |
| EGH400-2 | Research Project 2 | |
| EGH421 | Vibration and Control | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| | | |

Study Area Description

For more details and description on this minor please refer to the <u>EN01</u> <u>Complementary Studies</u> at the Faculty's <u>Student Zone</u> under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on **statistical science** (suggested pathway: MXB101, MXB107, MXB202, MXB242), **mathematical and statistical modelling** (suggested pathway: MXB101, MXB105, MXB221, MXB241), **applied mathematics** (suggested pathway: MXB105, MXB106, MXB202, MXB221), **simulation** (suggested pathway: MXB101, MXB106, MXB232, MXB261), **computation and modelling** (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- <u>Unit List</u>
- SUGGESTED PATHWAYS
- <u>Statistical Science</u>
 <u>Mathematical and Statistical</u>
- <u>Modelling</u>
- Applied Mathematics
- <u>Simulation Science</u>
- <u>Computation, modelling and</u> <u>simulation</u>

| Unit List | |
|--------------------------------------|---|
| Code | Title |
| Select 2 units (24 Option List 1: | credit points) from Unit |
| MXB101 | Probability and Stochastic Modelling |

| | 1 | |
|--|--|--|
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| MXB107 | Introduction to Statistical Modelling | |
| Select 2 units (24 credit points) from Unit Option List 2: | | |
| MXB202 | Advanced Calculus | |
| MXB221 | Ordinary Differential Equations | |
| MXB232 | Introduction to Operations Research | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| MXB242 | Regression and Design | |
| MXB261 | Modelling and Simulation Science | |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling 2 |

| Applied Mathematics | |
|---------------------|--|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential |

| | Equations |
|---------------------------------------|--|
| | |
| Simulation Science | 9 |
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB106 | Linear Algebra and Differential Equations |
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |
| | |
| Computation, modelling and simulation | |
| Code | Title |

| - | |
|--|--|
| Title | |
| Introductory Computational Mathematics | |
| Calculus of One and Two Variables | |
| Ordinary Differential Equations | |
| Modelling and Simulation Science | |
| | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=EN01&courseID=32727. CRICOS No.00213J



| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Associate Professor Jason Ford |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Mechatronics) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Strudent Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

| Code | Title |
|---------------------|--|
| Year 1 - Semester 1 | |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours) (Mechatronics)

| OR | |
|--|-------------------------------|
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 | Engineering Computation |
| Plus 36cp from ONE of the Engineering Foundation Strands | |

Please note that the highlighted units must be enrolled in the year and semester specified

The highlighted units are EGB242, CAB202, EGB345, EGH446, SEB400, EGH400-1 and EGH400-2

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
- ٠ Year 3, Semester 1
- Year 3, Semester 2 ٠
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title | |
|-------------------------------------|--|--|
| Year 2, Semester 1 | | |
| EGB242 | Signal Analysis | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB220 | Mechatronics Design 1 | |
| 2nd Major/Minor un | it | |
| EGB211 | Dynamics | |
| 2nd Major/Minor Un | iit | |
| Year 2, Semester 2 | | |
| EGB345 | Control and Dynamic Systems | |
| EGB320 | Mechatronics Design 2 | |
| 2nd Major/Minor un | it | |
| EGB211 | Dynamics | |
| 2nd Major/Minor unit | | |
| Intermediate Electrical Unit Option | | |
| 2nd major/Minor unit | | |
| Year 3, Semester 1 | | |
| EGH446 | Autonomous Systems | |
| EGB321 | Dynamics of Machines | |
| 2nd Major/Minor unit | | |
| EGB220 | Mechatronics Design 1 | |
| OR | | |
| EGH419 | Mechatronics Design 3 | |
| 2nd major/Minor unit | | |
| Advanced Electrical Unit Option | | |

| 2nd Major/Minor unit | | |
|---|--|--|
| Year 3, Semester 2 | | |
| EGH404 | Research in Engineering Practice | |
| EGB320 | Mechatronics Design 2 | |
| EGH445 | Modern Control | |
| Intermediate/ Advanced Electrical Unit Option | | |
| 2nd Major/Minor unit | | |
| EGH413 | Advanced Dynamics | |
| 2nd Major/Minor uni | it | |
| Year 4, Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| EGH419 | Mechatronics Design 3 | |
| 2nd Major/Minor unit | | |
| Advanced Electrical Unit Option | | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH413 | Advanced Dynamics | |
| 2nd Major/Minor unit | | |
| EGH445 | Modern Control | |
| 2nd Major/Minor unit | | |
| Advanced Electrical Unit Options | | |
| 2nd Major/Minor unit | | |

2nd Major/Minor unit

2nd Major/Minor unit

If you intend to select the Civil Engineering Major, please refer your first year study plan at Civil major 1st Year - July Entry.

OR

If you intend to select the Medical Engineering Major, please refer your first year study plan at Medical major 1st Year - July Entry.

| Code | Title | |
|-----------------|--|--|
| Year 1 - Semest | er 2 | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| EGB113 | Energy in Engineering Systems | |
| OR | | |
| PVB101 | Physics of the Very | |

| | Large |
|------------------------|--|
| EGB123 | Civil Engineering Systems |
| OR | |
| Foundation Unit Option | |
| Year 2 - Semest | er 1 |
| MZB126 | Engineering Computation |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| EGB120 | Foundations of Electrical Engineering |
| OR | |
| Foundation Unit Option | |

This is an example study plan for students on a relatively standard progression, however, depending on which units and second majors/minors you choose, you may need to deviate from that plan. Please contact sef.enguiry@gut.edu.au if you wish to discuss your study plan options.

Semesters

- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Year 5, Semester 1

| Code | Title | |
|-------------------------------------|--|--|
| Year 2, Semester 2 | | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB211 | Dynamics | |
| EGB242 | Signal Analysis | |
| 2nd Major/Minor Un | iit | |
| Year 3, Semester 1 | | |
| EGB220 | Mechatronics Design 1 | |
| EGB321 | Dynamics of Machines | |
| 2nd Major/Minor Unit | | |
| 2nd Major/Minor Un | iit | |
| Year 3, Semester 2 | | |
| EGB320 | Mechatronics Design 2 | |
| EGB345 | Control and Dynamic Systems | |
| Select one of: | | |
| EGH413 | Advanced Dynamics | |
| Intermediate Electrical Option Unit | | |
| Select one of: | | |
| EGH413 | Advanced Dynamics | |
| 2nd Major/Minor Unit | | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=EN01&courseID=32726. CRICOS No.00213J

Bachelor of Engineering (Honours) (Mechatronics)

| Year 4, Semester 1 | | |
|-------------------------------------|--|--|
| EGH404 | Research in Engineering Practice | |
| EGH419 | Mechatronics Design 3 | |
| EGH446 | Autonomous Systems | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 2 | | |
| EGH400-1 | Research Project 1 | |
| EGH445 | Modern Control | |
| 2nd Major/Minor Unit | | |
| Select one of: | | |
| EGH413 | Advanced Dynamics | |
| Intermediate Electrical Option Unit | | |
| 2nd Major/Minor Unit | | |
| Year 5, Semester 1 | | |
| EGH400-2 | Research Project 2 | |
| Advanced Electrical Option Unit | | |
| 2nd Major/Minor Unit | | |
| 2nd Major/Minor Unit | | |
| | | |

Study Area Description

For more details and description on this minor please refer to the EN01 Complementary Studies at the Faculty's Student Zone under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on statistical science (suggested pathway: MXB101, MXB107, MXB202, MXB242), mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- Unit List
- SUGGESTED PATHWAYS
- Statistical Science
- Mathematical and Statistical • Modelling
- **Applied Mathematics**
- Simulation Science
- Computation, modelling and simulation

| Unit List | | |
|--|-----------------|--|
| Code | Title | |
| Select 2 units (24 credit points) from Unit Option List 1: | | |
| MXB101 | Probability and | |

| Stochastic Modelling 1 | | |
|--|--|--|
| Introductory Computational Mathematics | | |
| Calculus of One and Two Variables | | |
| Linear Algebra and Differential Equations | | |
| Introduction to Statistical Modelling | | |
| Select 2 units (24 credit points) from Unit Option List 2: | | |
| Advanced Calculus | | |
| Ordinary Differential Equations | | |
| Introduction to Operations Research | | |
| Probability and Stochastic Modelling 2 | | |
| Regression and Design | | |
| Modelling and | | |
| | | |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling |

| Applied Mathematics | |
|---------------------|--|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |

| MXB221 | Ordinary Differential Equations |
|--------------------|--|
| Simulation Science | |
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB106 | Linear Algebra and Differential Equations |
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |

| Computation, modelling and simulation | | |
|---------------------------------------|--|--|
| Code Title | | |
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB221 | Ordinary Differential Equations | |
| MXB261 | Modelling and Simulation Science | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=EN01&courseID=32726. CRICOS No.00213J



| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Devakar Epari |
| | d.epari@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|---|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Medical) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified

timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

| Code | Title |
|-----------------|--|
| Year 1 - Semest | er 1 |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours) (Medical)

| OR | | |
|--|-------------------------------|--|
| MXB161 | Computational Explorations | |
| Year 1 - Semester 2 | | |
| MZB126 | Engineering Computation | |
| Plus 36cp from ONE of the Engineering Foundation Strands | | |

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
 Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 • Year 4, Semester 2

| Code | Title | |
|---------------------------|--------------------------------------|--|
| Year 2, Semeste | r 1 | |
| EGB211 | Dynamics | |
| EGB214 | Materials and Manufacturing | |
| EGB210 | Fundamentals of Mechanical Design | |
| LSB131 | Anatomy | |
| Year 2, Semeste | r 2 | |
| EGB314 | Strength of Materials | |
| LSB231 | Physiology | |
| 2nd Major/Minor | unit | |
| 2nd Major/Minor | unit | |
| Year 3, Semeste | r 1 | |
| EGB319 | BioDesign | |
| EGB323 | Fluid Mechanics | |
| EGH414 | Stress Analysis | |
| 2nd Major/Minor | unit | |
| Year 3, Semeste | r 2 | |
| EGH418 | Biomechanics | |
| EGH424 | Biofluids | |
| EGH404 | Research in Engineering Practice | |
| 2nd Major/Minor | unit | |
| Year 4, Semeste | r 1 | |
| EGH438 | Biomaterials | |
| EGH400-1 | Research Project 1 | |
| 2nd Major/Minor | unit | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| | Modelling and Simulation for Medical | |
| EGH435 | Engineers | |
| EGH435 2nd Major/Minor | Engineers | |
| | Engineers unit | |

| Code | Title | |
|------------------------|--|--|
| Year 1, Semeste | er 2 | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| EGB113 | Energy in Engineering Systems | |
| OR | | |
| PVB101 | Physics of the Very Large | |
| EGB123 | Civil Engineering Systems | |
| OR | | |
| Foundation Unit Option | | |
| Voor 1. Compoter 1 | | |

| Year 1, Semester 1 | | |
|--------------------|-------------------------------------|--|
| MZB126 | Engineering Computation | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| LSB131 | Anatomy | |

Semesters

| ٠ | Year | 2, | Semester | 2 |
|---|------|----|----------|---|
| | | | | |

- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
 Year 5, Semester 1

| Code | Title | |
|----------------------|--|--|
| Year 2, Seme | ster 2 | |
| LSB231 | Physiology | |
| EGB120 | Foundations of Electrical Engineering | |
| Or Foundation | n Unit Option | |
| EGB211 | Dynamics | |
| 2nd Major/Mir | nor unit | |
| Year 3, Seme | ster 1 | |
| EGB210 | Fundamentals of Mechanical Design | |
| EGB214 | Materials and Manufacturing | |
| EGB323 | Fluid Mechanics | |
| 2nd Major/Minor unit | | |
| Year 3, Seme | ster 2 | |
| EGB314 | Strength of Materials | |
| EGH418 | Biomechanics | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 1 | | |
| EGB319 | BioDesign | |

| EGH404 | Research in Engineering Practice | |
|----------------------|--|--|
| EGH414 | Stress Analysis | |
| 2nd Major/Minor | unit | |
| Year 4, Semeste | r 2 | |
| EGH424 | Biofluids | |
| EGH435 | Modelling and Simulation for Medical Engineers | |
| EGH400-1 | Research Project 1 | |
| 2nd Major/Minor unit | | |
| Year 5, Semester 1 | | |
| EGH400-2 | Research Project 2 | |
| EGH438 | Biomaterials | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |

Study Area Description

For more details and description on this minor please refer to the EN01 **Complementary Studies** at the Faculty's Student Zone under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on statistical science (suggested pathway: MXB101, MXB107, MXB202, MXB242), mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- Unit List
- SUGGESTED PATHWAYS
- <u>Statistical Science</u>
- Mathematical and Statistical Modelling
- Applied Mathematics
- Simulation Science
- Computation, modelling and simulation

Unit List

| Code | Title | |
|---|--|--|
| Select 2 units (24 credit points) from Unit Option List 1: | | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and | |

Bachelor of Engineering (Honours) (Medical)

| | Differential Equations | |
|--|--|--|
| MXB107 | Introduction to Statistical Modelling | |
| Select 2 units (24 credit points) from Unit Option List 2: | | |
| MXB202 | Advanced Calculus | |
| MXB221 | Ordinary Differential Equations | |
| MXB232 | Introduction to Operations Research | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| MXB242 | Regression and Design | |
| MXB261 | Modelling and Simulation Science | |

| MXB106 | Linear Algebra and Differential Equations |
|--------|--|
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |

| Computation, modelling and simulation | |
|---------------------------------------|--|
| Code | Title |
| MXB103 | Introductory Computational Mathematics |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB261 | Modelling and Simulation Science |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling 2 |

| Applied Mathematics | |
|---------------------|---|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential Equations |

| Simulation Science | |
|--------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |



| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Thomas Rainey |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Process) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

| Code | Title |
|-----------------|--|
| Year 1 - Semest | er 1 |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours) (Process)

| OR | |
|--|-------------------------------|
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 | Engineering Computation |
| Plus 36cp from ONE of the Engineering Foundation Strands | |

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title | |
|----------------------|---|--|
| Year 2, Semeste | er 1 | |
| EGB261 | Unit Operations | |
| EGB262 | Process Principles | |
| EGB323 | Fluid Mechanics | |
| 2nd Major/Minor | Unit | |
| Year 2, Semeste | er 2 | |
| CVB101 | General Chemistry | |
| EGB322 | Thermodynamics | |
| 2nd Major/Minor | Unit | |
| 2nd Major/Minor | | |
| Year 3, Semeste | er 1 | |
| EGB361 | Minerals and Minerals Processing | |
| EGB362 | Operations Management and Process Economics | |
| 2nd Major/Minor | Unit | |
| 2nd Major/Minor | Unit | |
| Year 3, Semeste | er 2 | |
| EGB364 | Process Modelling | |
| EGH404 | Research in Engineering Practice | |
| EGH411 | Industrial Chemistry | |
| EGH422 | Advanced Thermodynamics | |
| Year 4, Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| EGH463 | Plant and Process Design | |
| 2nd Major/Minor Unit | | |
| 2nd Major/Minor Unit | | |
| Year 4, Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH423 | Fluids Dynamics | |
| EGH462 | Process Control | |
| 2nd Major/Minor Unit | | |

If you intend to select the Civil Engineering Major, please refer your first year study plan at Civil major 1st

Year - July Entry.

OR

If you intend to select the Medical Engineering Major, please refer your first year study plan at Medical major 1st Year - July Entry.

| Code | Title | |
|------------------------|--|--|
| Year 1 - Semest | er 2 | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| EGB113 | Energy in Engineering Systems | |
| OR | | |
| PVB101 | Physics of the Very Large | |
| EGB123 | Civil Engineering Systems | |
| OR | | |
| Foundation Unit Option | | |
| Year 2 - Semest | er 1 | |
| MZB126 | Engineering Computation | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| EGB120 | Foundations of Electrical Engineering | |
| OR | | |
| | | |

Foundation Unit Option

Semesters

- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 Year 4, Semester 2
- Year 5, Semester 1

| Code | Title |
|----------------------|------------------------------|
| Year 2, Semeste | r 2 |
| CVB101 | General Chemistry |
| 2nd Major/Minor | Unit |
| 2nd Major/Minor Unit | |
| 2nd Major/Minor Unit | |
| Year 3, Semester 1 | |
| EGB261 | Unit Operations |
| EGB262 | Process Principles |
| EGB323 | Fluid Mechanics |
| EGB362 | Operations Management and |

| Process Economics | | |
|----------------------|-------------------------------------|--|
| Year 3, Semester 2 | | |
| EGB322 | Thermodynamics | |
| EGB364 | Process Modelling | |
| EGH411 | Industrial Chemistry | |
| 2nd Major/Minor Unit | | |
| Year 4, Semeste | er 1 | |
| EGB361 | Minerals and Minerals Processing | |
| EGH404 | Research in Engineering Practice | |
| 2nd Major/Minor Unit | | |
| 2nd Major/Minor Unit | | |
| Year 4, Semester 2 | | |
| EGH400-1 | Research Project 1 | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |
| EGH462 | Process Control | |
| Year 5, Semester 1 | | |
| EGH400-2 | Research Project 2 | |
| EGH463 | Plant and Process Design | |
| 2nd Major/Minor Unit | | |
| 2nd Major/Minor Unit | | |

Study Area Description

For more details and description on this minor please refer to the EN01 **Complementary Studies** at the Faculty's Student Zone under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on statistical science (suggested pathway: MXB101, MXB107, MXB202, MXB242), mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- Unit List
- SUGGESTED PATHWAYS
- Statistical Science
- Mathematical and Statistical Modelling
- Applied Mathematics
- Simulation Science
- <u>Computation, modelling and</u> simulation

Unit List Code

Title Select 2 units (24 credit points) from Unit



Bachelor of Engineering (Honours) (Process)

| Option List 1: | | |
|---|--|--|
| MXB101 | Probability and Stochastic Modelling 1 | |
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| MXB107 | Introduction to Statistical Modelling | |
| Select 2 units (24 credit points) from Unit Option List 2: | | |
| MXB202 | Advanced Calculus | |
| MXB221 | Ordinary Differential Equations | |
| MXB232 | Introduction to Operations Research | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| MXB242 | Regression and Design | |
| MXB261 | Modelling and Simulation Science | |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling 2 |

| Applied Mathematics | |
|---------------------|-----------------------------------|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and |

| | Differential Equations |
|--------------------|------------------------------------|
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential Equations |
| | |
| Simulation Science | |

| Simulation Science | |
|--------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB106 | Linear Algebra and Differential Equations |
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |

| Computation, modelling and simulation | |
|---------------------------------------|--|
| Code | Title |
| MXB103 | Introductory Computational Mathematics |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB261 | Modelling and Simulation Science |

Bachelor of Engineering

Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | EN40 |
| CRICOS | 056529D |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for all primary majors in this course. In addition, Software Engineering also has full professional accreditation with the Australian Computer Society.

Second Majors

Depending on your choice of primary major, you may have the opportunity to undertake a second major or two minors. A second major is an established set of eight units (96 credit points) in the same discipline. A minor is an established set of four units (48 credit points) in the same discipline or from anywhere in the University. You will select your primary major, second major and/or minors after the completion of your first year.

Honours

EN40 students who meet GPA requirements are eligible to be awarded

Bachelor of Engineering with Honours. The Honours GPA requirements are set out in <u>MOPP – 5.2.5 Grading system –</u> <u>awards with honours and bachelor</u> <u>honours degrees</u>.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment). QUT

Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | EN40 |
| CRICOS | 056529D |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Aaron Mcfadyen |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International Testing System) | English Language |
|---|------------------|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Honours

EN40 students who meet GPA requirements are eligible to be awarded Bachelor of Engineering with Honours. The Honours GPA requirements are set out in <u>MOPP – 5.2.5 Grading system –</u> <u>awards with honours and bachelor</u> <u>honours degrees</u>.

Special Course Requirements

Students must complete 60 days approved industrial experience in an engineering environment, including 10 days specialist experience in the avionics industry as part of the Work Integrated Learning unit.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure Work Integrated Learning unit

Students must complete 60 days approved industrial experience in an engineering environment, including 10 days specialist experience in the avionics industry as part of the Work Integrated Learning unit.

Your course Year 1

Common first-year units include the foundation of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

A solid grounding in the basic terminology and work practices commonly employed in the aerospace industry provide an understanding of air, spacecraft flight control principles and safety aspects of aviation. Exciting wind tunnel tests and understanding of Mach number effects, fundamentals of aircraft performance, estimating range and endurance, take off and landing calculations and light envelopes also feature.

Year 3

Emphasis on the flight control systems of modern aircraft, which is one of the primary subsystems. You are introduced to methods for modelling the dynamic behaviour of aircraft, missiles and spacecraft, and criteria for stability. Systems engineering methodologies and techniques are applied to aerospace engineering projects such as design and operation of a fully autonomous micro air vehicle or rocket.

Year 4

Advanced concepts such as spacecraft guidance and navigation, orbit and altitude determination, dynamics for low earth satellites and also the dynamics of rocket ascent trajectories. Relevant RF and applied electromagnetic aerospace radio radar systems and navigation systems for aircraft are explored. You



undertake a one-year project and work integrated learning.

International Course structure Work Integrated Learning unit

Students must complete 60 days approved industrial experience in an engineering environment, including 10 days specialist experience in the avionics industry as part of the Work Integrated Learning unit.

Your course

Year 1

Common first-year units include the foundation of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

A solid grounding in the basic terminology and work practices commonly employed in the aerospace industry provide an understanding of air, spacecraft flight control principles and safety aspects of aviation. Exciting wind tunnel tests and understanding of Mach number effects, fundamentals of aircraft performance, estimating range and endurance, take off and landing calculations and light envelopes also feature.

Year 3

Emphasis on the flight control systems of modern aircraft, which is one of the primary subsystems. You are introduced to methods for modelling the dynamic behaviour of aircraft, missiles and spacecraft, and criteria for stability. Systems engineering methodologies and techniques are applied to aerospace engineering projects such as design and operation of a fully autonomous micro air vehicle or rocket.

Year 4

Advanced concepts such as spacecraft guidance and navigation, orbit and altitude determination, dynamics for low earth satellites and also the dynamics of rocket ascent trajectories. Relevant RF and applied electromagnetic aerospace radio radar systems and navigation systems for aircraft are explored. You undertake a one-year project and work integrated learning.

Sample Structure Course Updates

From 2015, some first year core units in EN40 Bachelor of Engineering have been recoded, renamed or discontinued. To see how these changes affect you, please consult the Engineering unit replacement table below in conjunction with the revised 2015 course structures. Affected Study Plans are being amended to reflect the changes.

Please contact the Faculty if you have any concerns.

Engineering Unit Replacement Table

Semesters

- Year 1 Semester 1
- Year 1 Semester 2 Year 2 Semester 1
- .
- Year 2 Semester 2
- Year 3 Semester 1 • •
- Year 3 Semester 2
- Year 4 Semester 1 .
- Year 4 Semester 2
- Aerospace Avionics Selectives

| Code | Title |
|---------------------------|---|
| Year 1 - Seme | ester 1 |
| EGB100 | Engineering Sustainability and Professional Practice |
| [ENB100 repla | aced by EGB100 in 2015.] |
| EGB121 | Engineering Mechanics |
| [ENB110 repla 2015.] | aced by EGB121 in SEM-2 |
| EGB113 | Energy in Engineering Systems |
| [ENB130 repla | aced by EGB113 in 2015.] |
| MZB125 | Introductory Engineering Mathematics |
| [MAB125 repla | aced by MZB125 in 2015.] |
| Or | |
| MXB106 | Linear Algebra and Differential Equations |
| [MAB126 repl | aced by MXB106 in 2015.] |
| Year 1 - Seme | ester 2 |
| EGB120 | Foundations of Electrical Engineering |
| [ENB120 repla | aced by EGB120 in 2015] |
| EGB111 | Foundation of Engineering Design |
| [ENB150 repla | aced by EGB111 in 2015.] |
| Engineering L OPTIONS) | Init Option (ENEN- |
| | Jnit Option replaces 15. See Engineering Unit |
| MXB106 | Linear Algebra and Differential Equations |
| [MAB126 repl | aced by MXB106 in 2015.] |

OR Calculus of One and Two **MXB105** Variables [MAB127 replaced by MXB105 in SEM-2 2015.] Year 2 - Semester 1 Introduction To **ENB240** Electronics Engineering Problem **ENB246** Solving Electromagnetics and **EGB241** Machines [ENB250 replaced by EGB241 or ELEC-OPTIONS (if both ENB250 and ENB343 to complete). See Study Plan for unit options in 2016] Calculus of One and Two **MXB105** Variables [MAB127 replaced by MXB105 in SEM-2 2015.] OR Introduction to Statistical **MXB107** Modelling [MAB233 replaced by MXB107 in 2015.] Year 2 - Semester 2 ENB121 Aerodynamics Note: ENB121 is replaced by EGB243 (sem 1 unit) from 2016 -Aircraft Systems and **EGB243** Flight **EGB242** Signal Analysis ENB242 replaced by EGB242 in 2016. Electrical and Computer **ENB205** Engineering [ENB243 replaced by ENB205 or ELEC-OPTIONS in 2016.] Microprocessors and CAB202 **Digital Systems** [ENB244 replaced by CAB202 in 2014.] Year 3 - Semester 1 **ENB241** Software Systems Design Signals, Systems and **ENB342** Transforms Introduction To Systems **ENB354** Design Electromagnetics and **EGB241** Machines [ENB343 replaced by EGB241 in 2016.] Year 3 - Semester 2 Work Integrated Learning **SEB701** 1 Control and Dynamic **EGB345** Systems [ENB348 replaced by EGB345 in 2016.] Advanced Systems **ENB355** Design Introduction to Statistical **MXB107** Modelling



Bachelor of Engineering (Aerospace Avionics)

[MAB233 replaced by MXB107 in 2015.]

| υ | R |
|---|---|
| | |

| Selective | |
|---|--|
| Year 4 - Seme | ester 1 |
| BEB801 | Project 1 |
| ENB346 | Digital Communications |
| ENB440 | RF Techniques and Modern Applications |
| ENB451 | Aerospace Radio and Radar Systems |
| Year 4 - Seme | ester 2 |
| BEB802 | Project 2 |
| ENB458 | Modern Control Systems |
| [ENB347 repla | aced by ENB458 in 2016.] |
| ENB357 | Spacecraft Dynamics and Control |
| ENB447 | Navigation Systems For Aircraft |
| | |
| Aerospace Av | rionics Selectives |
| Aerospace Av ENB344 | ionics Selectives Industrial Electronics |
| - | |
| ENB344 | Industrial Electronics Applied Image |
| ENB344 ENB441 | Industrial Electronics Applied Image Processing Signal Processing and |
| ENB344 ENB441 ENB448 CAB201 | Industrial Electronics Applied Image Processing Signal Processing and Filtering |
| ENB344 ENB441 ENB448 CAB201 | Industrial Electronics Applied Image Processing Signal Processing and Filtering Programming Principles |
| ENB344 ENB441 ENB448 CAB201 [INB270 repla ENB457 | Industrial Electronics Applied Image Processing Signal Processing and Filtering Programming Principles ced by CAB201 in 2015.] Controls, Systems and Applications 7 requires Subject Area |
| ENB344 ENB441 ENB448 CAB201 [INB270 repla ENB457 (Note: ENB45 | Industrial Electronics Applied Image Processing Signal Processing and Filtering Programming Principles ced by CAB201 in 2015.] Controls, Systems and Applications 7 requires Subject Area |



| Year | 2018 |
|------------------------------|--|
| QUT code | EN40 |
| CRICOS | 056529D |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Brian Lee |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International Testing System) | English Language |
|---|------------------|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Civil and Construction) must complete at least 60 days of industrial experience/ practice in an engineering construction environment as part of the Work Integrated Learning unit.

Second Majors and Minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

CIVIL AND CONSTRUCTION ENGINEERING Second Major and Minor Options Second Major: Civil Infrastructure

Minors:

Civil and Construction Engineering minor plus

A minor from anywhere in QUT that is outside of the course (see <u>University</u> <u>Wide Minors</u>), or one of the Engineering Minors - Dynamics Minor, Materials and Design Minor, Robotics Minor or Thermofluids Minor.

Please note: The Work Integrated Learning unit (BEB701) and the project unit (BEB801) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

International Student Entry

International students who are interested in mid-year entry should consult the Faculty of Built Environment and Engineering Student Services section regarding the course structure to be undertaken.

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

Apply knowledge of fundamental engineering science in design areas of timber and concrete construction. Explore theoretical aspects of geotechnical and materials engineering. Your theoretical understanding is reinforced by practical experience in our laboratories. Develop skills in construction administration and project management. Engineering statistics mathematical skills also help



Bachelor of Engineering (Civil and Construction)

your understanding of all aspects of engineering design.

Year 3

Increase your knowledge and skills in geotechnical engineering, construction management, law and other related construction practices. Explore steel construction. Continue to develop communication and organisational skills by writing reports, presenting seminars and working in small groups. Choose a second study area.

Year 4

Build on your third year to complete your second study area. Undertake a major project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You also complete your work integrated learning.

Second majors and minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

Please refer to the rules before making your selection.

Electrical engineering second major and minor options

Second major:

Civil Infrastructure

Minors:

 Civil and Construction Engineering minor

plus

• A minor from anywhere in QUT that is outside of the course.

Please note: The Work Integrated Learning unit (BEB701) and the project unit (BEB801) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

International Course structure

Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course

Year 1

Common first-year units include the foundations of engineering mathematics,

basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

Apply knowledge of fundamental engineering science in design areas of timber and concrete construction. Explore theoretical aspects of geotechnical and materials engineering. Your theoretical understanding is reinforced by practical experience in our laboratories. Develop skills in construction administration and project management. Engineering statistics mathematical skills also help your understanding of all aspects of engineering design.

Year 3

Increase your knowledge and skills in geotechnical engineering, construction management, law and other related construction practices. Explore steel construction. Continue to develop communication and organisational skills by writing reports, presenting seminars and working in small groups. Choose a second study area.

Year 4

Build on your third year to complete your second study area. Undertake a major project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You also complete your work integrated learning.

Second majors and minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

Please refer <u>to the rules</u> before making your selection.

Electrical engineering second major and minor options

Second major:

• Civil Infrastructure

Minors:

 Civil and Construction Engineering minor

plus

 A minor from anywhere in QUT that is outside of the course.

Please note: The Work Integrated Learning unit (BEB701) and the project unit (BEB801) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- <u>Year 4 Semester 1</u>
 <u>Year 4 Semester 2</u>
- <u>Civil and Construction Engineering</u>
 <u>Selectives</u>

| Code | Title |
|--------------------------------------|--|
| Year 1 - Semest | |
| EGB100 | Engineering Sustainability and Professional Practice |
| [ENB100 replace | ed by EGB100 in 2015.] |
| ENB110 | Engineering Statics and Materials |
| EGB113 | Energy in Engineering Systems |
| [ENB130 replace | ed by EGB113 in 2015.] |
| MZB125 | Introductory Engineering Mathematics |
| [MAB125 replac | ed by MZB125 in 2015.] |
| Or | |
| MXB106 | Linear Algebra and Differential Equations |
| [MAB126 replac | ed by MXB106 in 2015.] |
| Year 1 - Semest | er 2 |
| EGB120 | Foundations of Electrical Engineering |
| [ENB120 replace | ed by EGB120 in 2015.] |
| ENB150 | Introducing Engineering Design |
| Note: ENB150 is (sem 1 unit) from | replaced by EGB111 n 2015 - |
| EGB111 | Foundation of Engineering Design |
| Engineering Uni OPTIONS) | t Option (ENEN- |
| | it Option replaces 5. See Engineering Unit |
| MXB106 | Linear Algebra and Differential Equations |
| [MAB126 replac or MZB126 in Se | ed by MXB106 in 2015 emester 1.] |
| OR | |
| MXB105 | Calculus of One and Two Variables |
| [MAB127 replac | ed by MXB105 in 2015.] |
| Year 2 - Semest | er 1 |



| ENB270Engineering Mechanics of MaterialsENB376Transport Engineering Design ProjectEGB270Civil Engineering MaterialsENB476Civil Engineering Design Project[ENB273 replaced by EGB270 in 2016.]ENB272Geotechnical Engineering 1MXB107Introduction to Statistical ModellingIntroduction to Statistical Modelling[MAB233 replaced by MXB107 in 2015.]Year 2 - Semester 2EGB273Principles of Construction[ENB275 replaced by EGB273 in 2016.]ENB276Structural Engineering 1ENB276Structural Engineering 1ENB274Design of Environmentally Sustainable Systems[UDB214 replaced by ENB274 in 2016.]Year 3 - Semester 1ENB277Construction |
|---|
| EGB270 Civil Engineering Materials Design Project ENB273 replaced by EGB270 in 2016.] Engineering 1 ENB272 Geotechnical Engineering 1 MXB107 Introduction to Statistical Modelling [MAB233 replaced by MXB107 in 2015.] Year 2 - Semester 2 EGB273 Principles of Construction [ENB275 replaced by EGB273 in 2016.] ENB276 Structural Engineering 1 ENB280 Hydraulic Engineering 1 ENB274 Design of Environmentally Sustainable Systems [UDB214 replaced by ENB274 in 2016.] Year 3 - Semester 1 |
| ENB272Geotechnical Engineering 1MXB107Introduction to Statistical Modelling[MAB233 replaced by MXB107 in 2015.]Year 2 - Semester 2EGB273Principles of Construction[ENB275 replaced by EGB273 in 2016.]ENB276Structural Engineering 1ENB280Hydraulic Engineering Environmentally Sustainable Systems[UDB214 replaced by ENB274 in 2016.]Year 3 - Semester 1 |
| ENB272Engineering 1MXB107Introduction to Statistical Modelling[MAB233 replaced by MXB107 in 2015.]Year 2 - Semested by MXB107 in 2015.]Year 2 - Semested by MXB107 in 2015.]EGB273Principles of Construction[ENB275 replaced by EGB273 in 2016.]ENB276Structural Engineering 1ENB280Hydraulic Engineering 1ENB274Design of Environmentally Sustainable Systems[UDB214 replaced by ENB274 in 2016.]Year 3 - Semester 1 |
| MXB107Statistical Modelling[MAB233 replaced by MXB107 in 2015.]Year 2 - Semester 2EGB273Principles of Construction[ENB275 replaced by EGB273 in 2016.]ENB276Structural Engineering 1ENB280Hydraulic Engineering Design of Environmentally Sustainable Systems[UDB214 replaced by ENB274 in 2016.]Year 3 - Semester 1 |
| Year 2 - Semester 2EGB273Principles of Construction[ENB275 replaced by EGB273 in 2016.]ENB276Structural Engineering 1ENB280Hydraulic Engineering Design of Environmentally Sustainable Systems[UDB214 replaced by ENB274 in 2016.]Year 3 - Semester 1 |
| EGB273Principles of Construction[ENB275 replaced by EGB273 in 2016.]ENB276Structural Engineering 1ENB280Hydraulic Engineering Design of Environmentally Sustainable Systems[UDB214 replaced by ENB274 in 2016.]Year 3 - Semester 1 |
| EGB273Construction[ENB275 replaced by EGB273 in 2016.]ENB276Structural Engineering 1ENB280Hydraulic Engineering Design of Environmentally Sustainable Systems[UDB214 replaced by ENB274 in 2016.]Year 3 - Semester 1 |
| ENB276 Structural Engineering 1 ENB280 Hydraulic Engineering Design of Environmentally Sustainable Systems Sustainable Systems [UDB214 replaced by ENB274 in 2016.] Year 3 - Semester 1 |
| EINB270 1 ENB280 Hydraulic Engineering Design of Environmentally Sustainable Systems Sustainable Systems [UDB214 replaced by ENB274 in 2016.] Year 3 - Semester 1 |
| ENB274Design of Environmentally Sustainable Systems[UDB214 replaced by ENB274 in 2016.] Year 3 - Semester 1 |
| ENB274 Environmentally Sustainable Systems [UDB214 replaced by ENB274 in 2016.] Year 3 - Semester 1 |
| [UDB214 replaced by ENB274 in 2016.] Year 3 - Semester 1 |
| Year 3 - Semester 1 |
| ENIB277 Construction |
| Engineering Law |
| ENB375 Structural Engineering 2 |
| ENB381 Civil Engineering Construction |
| UXH311 Contract Administration |
| [UDB312 replaced by UXH311 in 2016.] |
| Year 3 - Semester 2 |
| ENB371 Geotechnical Engineering 2 |
| EGB476 Advanced Steel Design |
| [ENB373 replaced by EGB476 in 2016.] |
| ENB382 Estimating in Engineering Construction |
| Second Major/Minor unit |
| Year 4 - Semester 1 |
| BEB801 Project 1 |
| ENB471 Design of Concrete Structures and Foundations |
| Second Major/Minor unit |
| Second Major/Minor unit |
| Year 4 - Semester 2 |
| SEB701 Work Integrated Learning 1 |
| [BEB701 replaced by SEB701 in 2014.] |
| ENB481 Civil Engineering Project Management |
| Second Major/Minor unit |
| Selective |
| Civil and Construction Engineering Selectives |
| BEB802 Project 2 |



Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | EN40 |
| CRICOS | 056529D |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Brian Lee |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Civil and Environmental) must obtain at least 60 days of industrial experience/practice in an engineering environment as part of the Work Integrated Learning unit.

Domestic Course structure

Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

Apply your knowledge of fundamental engineering science in design areas of concrete construction. Explore the theoretical aspects of geotechnical, fluids and sustainable engineering. Your theoretical understanding is reinforced by practical experience in our laboratories. Engineering statistics mathematical skills also help your understanding of all aspects of engineering design.

Year 3

Increase your knowledge and skills in geotechnical and water engineering, and explore steel construction, highway and transport engineering. You are also introduced to environmental studies relating to population, resource management and environmental law. Continue to develop communication and organisational skills by writing reports, presenting seminars and working in small groups.

Year 4

Building on your third year by completing a major project which may be industry based will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You also complete work integrated learning. There are also additional electives to choose from.

International Course structure

Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course



Bachelor of Engineering (Civil and Environmental)

coordinator as part of the Work Integrated Learning unit.

Your course Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

Apply your knowledge of fundamental engineering science in design areas of concrete construction. Explore the theoretical aspects of geotechnical, fluids and sustainable engineering. Your theoretical understanding is reinforced by practical experience in our laboratories. Engineering statistics mathematical skills also help your understanding of all aspects of engineering design.

Year 3

Increase your knowledge and skills in geotechnical and water engineering, and explore steel construction, highway and transport engineering. You are also introduced to environmental studies relating to population, resource management and environmental law. Continue to develop communication and organisational skills by writing reports, presenting seminars and working in small groups.

Year 4

Building on your third year by completing a major project which may be industry based will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You also complete work integrated learning. There are also additional electives to choose from.

Sample Structure

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
 Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- <u>Civil and Environmental Engineering</u>
 <u>Selectives</u>

Code Title Year 1 - Semester 1

| EGB100 | Engineering Sustainability and Professional Practice | |
|--|---|--|
| [ENB100 replaced by EGB100 in 2015.] | | |
| ENB110 | Engineering Statics and Materials | |
| EGB113 | Energy in Engineering Systems | |
| [ENB130 r | eplaced by EGB113 in 2015.] | |
| MZB125 | Introductory Engineering Mathematics | |
| [MAB125 replaced by MZB125 in 2015.] or | | |
| MXB106 | Linear Algebra and Differential Equations | |
| | replaced by MXB106 in 2015 6 in Semester 1.] | |
| Year 1 - S | emester 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| [ENB120 r | eplaced by EGB120 in 2015.] | |
| ENB150 | Introducing Engineering Design | |
| | 3150 is replaced by EGB111 it) from 2015 - | |
| EGB111 | Foundation of Engineering Design | |
| Engineering Option Unit (ENEN- OPTIONS) | | |
| [Engineering Option Unit replaces ENB200 in 2015. See Engineering Unit Option List.] | | |
| MXB106 | Linear Algebra and Differential Equations | |
| [MAB126 replaced by MXB106 in 2015 or MZB126 in Semester 1.] | | |
| OR | Calculus of One and Two | |
| MXB105 | Variables | |
| [MAB127 | replaced by MXB105 in 2015.] | |
| Year 2 - S | | |
| ENB270 | Engineering Mechanics of Materials | |
| ENB272 | Geotechnical Engineering 1 | |
| EGB270 | Civil Engineering Materials | |
| [ENB273 r MXB107 | replaced by EGB270 in 2016.] Introduction to Statistical | |
| | Modelling replaced by MXB107 in 2015.] | |
| Year 2 - Semester 2 | | |
| ENB274 | Design of Environmentally Sustainable Systems | |
| EGB273 | Principles of Construction | |
| [ENB275 r | eplaced by EGB273 in 2016.] | |
| ENB276 | Structural Engineering 1 | |
| ENB280 | Hydraulic Engineering | |
| Year 3 - S | emester 1 | |
| ENB372 | Design and Planning of | |

Engineering Sustainability

| HighwaysENB378Water EngineeringENB378Environmental Resource ManagementEVB201Global Environmental IssuesORERB202ERB202Marine Geoscience[NQB302/NQB314 alternate replaced by EVB201/ERB202 in 2014.]Year 3 - Semester 2ENB371Geotechnical Engineering 2ENB376Transport EngineeringENB376Transport EngineeringENB380Environmental Law and AssessmentSelectiveYear 4 - Semester 1BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.]SelectiveYear 4 - Semester 2SEB701Work Integrated Learning 1 | | |
|--|--|--|
| ENB383Environmental Resource ManagementEVB201Global Environmental IssuesORERB202Marine Geoscience[NQB302/NQB314 alternate replaced by EVB201/ERB202 in 2014.]Year 3 - Semester 2ENB371Geotechnical Engineering 2ENB376Transport EngineeringENB380Environmental Law and AssessmentSelectiveYear 4 - Semester 1BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.]SelectiveYear 4 - Semester 2 | | |
| ENB383ManagementEVB201Global Environmental IssuesORERB202Marine Geoscience[NQB302/NQB314 alternate replaced by EVB201/ERB202 in 2014.]Year 3 - Semester 2ENB371Geotechnical Engineering 2ENB376Transport Engineering Environmental Law and AssessmentSelectiveYear 4 - Semester 1BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.]SelectiveYear 4 - Semester 2 | | |
| ORERB202Marine Geoscience[NQB302/NQB314 alternate replaced by EVB201/ERB202 in 2014.]Year 3 - Semester 2ENB371Geotechnical Engineering 2ENB376Transport EngineeringENB380Environmental Law and AssessmentSelectiveImage: SelectiveYear 4 - Semester 1BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.]SelectiveYear 4 - Semester 2 | | |
| ERB202Marine Geoscience[NQB302/NQB314 alternate replaced by EVB201/ERB202 in 2014.]Year 3 - Semester 2ENB371Geotechnical Engineering 2ENB376Transport EngineeringENB376Transport EngineeringENB380Environmental Law and AssessmentSelectiveYear 4 - Semester 1BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.]SelectiveYear 4 - Semester 2 | | |
| INQB302/NQB314 alternate replaced by EVB201/ERB202 in 2014.]Year 3 - Semester 2ENB371Geotechnical Engineering 2ENB376Transport Engineering Environmental Law and AssessmentSelectiveEnvironmental Law and AssessmentSelectiveYear 4 - Semester 1BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.]SelectiveYear 4 - Semester 2 | | |
| EVB201/ERB202 in 2014.]Year 3 - Semester 2ENB371Geotechnical Engineering 2ENB376Transport EngineeringENB380Environmental Law and AssessmentSelectiveEnvironmental Law and AssessmentYear 4 - Semester 1BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.]SelectiveYear 4 - Semester 2 | | |
| ENB371Geotechnical Engineering 2ENB376Transport EngineeringENB380Environmental Law and AssessmentSelectiveYear 4 - Semester 1BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.]SelectiveYear 4 - Semester 2 | | |
| ENB376Transport EngineeringENB380Environmental Law and AssessmentSelectiveYear 4 - Semester 1BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.]SelectiveYear 4 - Semester 2 | | |
| ENB380Environmental Law and AssessmentSelectiveYear 4 - Semester 1BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.] SelectiveSelectiveYear 4 - Semester 2 | | |
| ENB380AssessmentSelectiveYear 4 - Semester 1BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.]SelectiveYear 4 - Semester 2 | | |
| Year 4 - Semester 1BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.]SelectiveYear 4 - Semester 2 | | |
| BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.] SelectiveYear 4 - Semester 2 | | |
| BEB801Project 1PQB360Global Energy Balance and Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.] SelectiveYear 4 - Semester 2 | | |
| PCD500Climate ChangeUXB231Planning Processes[UDB266 replaced by UXB231 in 2015.]SelectiveYear 4 - Semester 2 | | |
| UXB231 Planning Processes [UDB266 replaced by UXB231 in 2015.] Selective Year 4 - Semester 2 | | |
| [UDB266 replaced by UXB231 in 2015.] Selective Year 4 - Semester 2 | | |
| Year 4 - Semester 2 | | |
| | | |
| SEB701 Work Integrated Learning 1 | | |
| | | |
| [BEB701 replaced by SEB701 in 2014.] | | |
| ENB377 Water and Waste Water Treatment Engineering | | |
| UXH331 Environmental Analysis and Planning | | |
| [UDB370 replaced by UXH331 in 2016.] | | |
| One of: | | |
| EVB204 Land Resource Assessment | | |
| EVB212 Soils and the Environment | | |
| ERB310 Groundwater Systems | | |
| [NQB403/NQB614 alternate replaced by EVB212/EVB204/ERB310. NQB403 replaced by EVB212/EVB204 in 2014. NQB614 replaced by ERB310 in 2015. Please note: EVB212 is a semester 1 unit.] | | |
| Civil and Environmental Engineering Selectives | | |
| BEB802 Project 2 | | |
| ENB379 Transport Engineering and Planning Applications | | |
| ENB474 Finite Element Methods | | |
| ENB476 Civil Engineering Design Project | | |
| ENB478 Advanced Water Engineering | | |
| ENB481 Civil Engineering Project Management | | |
| ENB485 Advanced Geotechnical Engineering Practice | | |



Bachelor of Engineering (Civil)

Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | EN40 |
| CRICOS | 056529D |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Brian Lee |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.0 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Second Majors and Minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

CIVIL ENGINEERING Second Major and Minor Options

Second Major: Structural Engineering Transport Engineering and Planning <u>Minors</u>: Civil Engineering minor *plus* A minor from anywhere in QUT that is outside of the course. (see <u>University</u> <u>Wide Minors</u>) or one of the Engineering Minors - Dynamics Minor, Materials and Design Minor, Robotics Minor or Thermofluids Minor. Please note: The Work Integrated Learning unit (BEB701) and the project unit (BEB801) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Civil) must obtain at least 60 days of industrial experience/practice in an engineering environment as part of the Work Integrated Learning unit.

Honours

EN40 students who meet GPA requirements are eligible to be awarded Bachelor of Engineering with Honours. The Honours GPA requirements are set out in <u>MOPP – 5.2.5 Grading system –</u> <u>awards with honours and bachelor</u> <u>honours degrees</u>.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course

Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

Apply knowledge of fundamental engineering science in design areas of timber and concrete construction, and begin to explore theoretical aspects of geotechnical, fluids and sustainable engineering. Your theoretical understanding is reinforced by practical experience in our laboratories. Engineering statistics mathematical skills



Bachelor of Engineering (Civil)

also help your understanding of all aspects of engineering design.

Year 3

Increase your knowledge and skills in geotechnical and water engineering. Explore steel construction, highway and transport engineering. Further develop communication and organisational skills by writing reports, presenting seminars and working in small groups. Choose your second study area.

Year 4

Build on your third year to complete your second study area. Undertake a major project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You also complete work integrated learning.

Second majors and minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

Please refer to the rules before making your selection.

Civil engineering second major and minor options

Second Major:

- Structural Engineering
- Transport Engineering and Planning

Minors:

• Civil Engineering minor

plus

• A minor from anywhere in QUT that is outside of the course.

Please note: The Work Integrated Learning unit (BEB701) and the project unit (BEB801) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

International Course structure

Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course

Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical

engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

Apply knowledge of fundamental engineering science in design areas of timber and concrete construction, and begin to explore theoretical aspects of geotechnical, fluids and sustainable engineering. Your theoretical understanding is reinforced by practical experience in our laboratories. Engineering statistics mathematical skills also help your understanding of all aspects of engineering design.

Year 3

Increase your knowledge and skills in geotechnical and water engineering. Explore steel construction, highway and transport engineering. Further develop communication and organisational skills by writing reports, presenting seminars and working in small groups. Choose your second study area.

Year 4

Build on your third year to complete your second study area. Undertake a major project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You also complete work integrated learning.

Second majors and minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

Please refer to the rules before making your selection.

Civil engineering second major and minor options

Second Major:

- Structural Engineering
- Transport Engineering and Planning

Minors:

Civil Engineering minor

plus

• A minor from anywhere in QUT that is outside of the course.

Please note: The Work Integrated Learning unit (BEB701) and the project unit (BEB801) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

Sample Structure

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
 Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 1
- Civil Engineering Selectives

| Code | Title | | |
|--|--|--|--|
| Year 1 - Semest | er 1 | | |
| EGB100 | Engineering Sustainability and Professional Practice | | |
| [ENB100 replaced by EGB100 in 2015.] | | | |
| ENB110 | Engineering Statics and Materials | | |
| EGB113 | Energy in Engineering Systems | | |
| [ENB130 replace | [ENB130 replaced by EGB113 in 2015.] | | |
| MZB125 | Introductory Engineering Mathematics | | |
| [MAB125 replac | ed by MZB125 in 2015.] | | |
| Or | | | |
| MXB106 | Linear Algebra and Differential Equations | | |
| [MAB126 replac | ed by MXB106 in 2015.] | | |
| Year 1 - Semest | er 2 | | |
| EGB120 | Foundations of Electrical Engineering | | |
| [ENB120 replaced by EGB120 in 2015.] | | | |
| ENB150 | Introducing Engineering Design | | |
| Note: ENB150 is replaced by EGB111 (sem 1 unit) from 2015 - | | | |
| EGB111 Foundation of Engineering Design | | | |
| Engineering Unit Option (ENEN- OPTIONS) | | | |
| [Engineering Unit Option replaces ENB200 in 2015. See Engineering Unit Option Lis.t] | | | |
| MXB106 | Linear Algebra and Differential Equations | | |
| [MAB126 replaced by MXB106 in 2015 or MZB126 in Semester 1.] | | | |
| OR | | | |
| MXB105 | Calculus of One and Two Variables | | |
| [MAB127 replac | ed by MXB105 in 2015.] | | |
| Year 2 - Semest | er 1 | | |
| ENB270 | Engineering Mechanics of Materials | | |
| ENB272 | Geotechnical Engineering 1 | | |



Bachelor of Engineering (Civil)

| Dachelor of Engineering (Olvin) | | |
|---------------------------------|---|--|
| EGB270 | Civil Engineering Materials | |
| [ENB273 replace | ed by EGB270 in 2016.] | |
| MXB107 | Introduction to Statistical Modelling | |
| [MAB233 replac | ed by MXB107 in 2015.] | |
| Year 2 - Semest | - | |
| | Design of | |
| ENB274 | Environmentally Sustainable Systems | |
| EGB273 | Principles of Construction | |
| [ENB275 replace | ed by EGB273 in 2016.] | |
| ENB276 | Structural Engineering 1 | |
| ENB280 | Hydraulic Engineering | |
| Year 3 - Semest | er 1 | |
| ENB372 | Design and Planning of Highways | |
| ENB375 | Structural Engineering 2 | |
| ENB378 | Water Engineering | |
| Second Major/M | inor unit | |
| Year 3 - Semest | er 2 | |
| ENB371 | Geotechnical | |
| | Engineering 2 | |
| ENB376 | Transport Engineering | |
| ENB377 | Water and Waste Water Treatment Engineering | |
| Second Major/M | inor unit | |
| Year 4 - Semest | er 1 | |
| SEB701 | Work Integrated Learning 1 | |
| [BEB701 replace | ed by SEB701 in 2014.] | |
| BEB801 | Project 1 | |
| ENB471 | Design of Concrete Structures and Foundations | |
| Second Major/M | linor unit | |
| Year 4 - Semest | er 2 | |
| ENB472 | Project Engineering 2 | |
| ENB476 | Civil Engineering Design Project | |
| Second Major/M | linor unit | |
| Selective | | |
| Civil Engineering | g Selectives | |
| BEB802 | Project 2 | |
| EGB476 | Advanced Steel Design | |
| [ENB373 replace | ed by EGB476 in 2016.] | |
| ENB379 | Transport Engineering and Planning Applications | |
| ENB380 | Environmental Law and Assessment | |
| ENB383 | Environmental Resource Management | |
| | | |

| ENB384 | Design of Masonry Structures |
|--------|--|
| ENB473 | Design and Construction of Multi- Storey Buildings |
| ENB474 | Finite Element Methods |
| ENB475 | Structural Engineering 3 |
| ENB477 | Facade Engineering |
| ENB478 | Advanced Water Engineering |
| ENB481 | Civil Engineering Project Management |
| ENB485 | Advanced Geotechnical Engineering Practice |



Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | EN40 |
| CRICOS | 056529D |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Wayne Kelly |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4,SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a

level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.0 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Course Overview

The course is a collaborative program between the areas of Engineering and Information Technology which provides students with the electrical engineering and software development skills to seek employment as software engineers. The engineering component consists of studies in electronic systems engineering while the information technology component concentrates on software engineering. These studies integrate into a cohesive course which gives a wide and advanced study of modern electronic and computing systems. This degree produces computer and electronic engineers especially suited for the development and application of electronic systems and computer systems in all areas of industry.

Career Outcomes

Software Engineers create, maintain and modify computer and software programs

such as operating systems or communications software. They may also evaluate and deploy new programming tools and techniques and analyse current software products. You may work in a range of occupational environments. Software engineers can work in Engineering/IT-specific industries, as well as in other organisations requiring software engineering expertise.

Professional Recognition

Full professional accreditation from Engineers Australia and the Australian Computer Society has been given for this course.

Special course requirements

Students are required to complete 60 days approved industrial experience as part of the Work Integrated Learning unit.

Honours

EN40 students who meet GPA requirements are eligible to be awarded Bachelor of Engineering with Honours. The Honours GPA requirements are set out in <u>MOPP – 5.2.5 Grading system –</u> <u>awards with honours and bachelor</u> <u>honours degrees</u>.

Domestic Course structure Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course

Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

You expand your knowledge of software development, and cover the fundamentals of analogue and digital electronics, and the approach to writing software to solve engineering problems. A mathematics unit is completed. Semester two expands on electronics circuit design, introduces fundamentals of telecommunications and networking protocols, and broadens computer programming skills.



Bachelor of Engineering (Computer and Software Systems)

Year 3

You build on your knowledge of software engineering principles, covering topics such as formal software engineering processes with an emphasis on agile methodologies, data structures and algorithms and modern software engineering practices. Microprocessors and embedded digital systems are explored. Principles of systems engineering and project management are introduced and applied through a realworld project.

Year 4

You undertake a major project which may be industry based, in which principles of software engineering learnt to date are brought together. Study also covers embedded systems and security. You also have the opportunity to take one or two electives.

International Course

structure

Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course

Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

You expand your knowledge of software development, and cover the fundamentals of analogue and digital electronics, and the approach to writing software to solve engineering problems. A mathematics unit is completed. Semester two expands on electronics circuit design, introduces fundamentals of telecommunications and networking protocols, and broadens computer programming skills.

Year 3

You build on your knowledge of software engineering principles, covering topics such as formal software engineering processes with an emphasis on agile methodologies, data structures and algorithms and modern software engineering practices. Microprocessors and embedded digital systems are explored. Principles of systems engineering and project management are introduced and applied through a realworld project.

Year 4

You undertake a major project which may be industry based, in which principles of software engineering learnt to date are brought together. Study also covers embedded systems and security. You also have the opportunity to take one or two electives.

Sample Structure Semesters

- Year 1 Semester 1
- Year 1 Semester 1
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- <u>Computer and Software Systems</u>
 <u>Selectives</u>

| Code | Title | |
|---|--|--|
| Year 1 - Semester 1 | | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| [ENB100 replaced by EGB100 in 2015.] | | |
| ENB110 | Engineering Statics and Materials | |
| EGB113 | Energy in Engineering Systems | |
| [ENB130 replace | ed by EGB113 in 2015.] | |
| MZB125 | Introductory Engineering Mathematics | |
| [MAB125 replaced by MZB125 in 2015.] | | |
| Or | | |
| MXB106 | Linear Algebra and Differential Equations | |
| [MAB126 replaced by MXB106 in 2015 or MZB126 in Semester 1.] | | |
| Year 1 - Semes | ter 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| [ENB120 replaced by EGB120 in 2015.] | | |
| ENB150 | Introducing Engineering Design | |
| Note - ENB150 is replaced by EGB111 (sem 1 unit) from 2015 - | | |
| EGB111 | Foundation of Engineering Design | |
| Engineering Unit Option (ENEN- OPTIONS) | | |
| [Engineering Unit Option replaces ENB200 in 2015. See Engineering Unit | | |

| Option List.] | |
|---|--|
| MXB106 | Linear Algebra and Differential Equations |
| [MAB126 replace | ed by MXB106 in 2015 |
| or MZB126 in S | emester 1.] |
| OR | |
| MXB105 | Calculus of One and Two Variables |
| | ed by MXB105 in 2015. |
| Year 2 - Semes | |
| ENB240 | Introduction To Electronics |
| ENB246 | Engineering Problem Solving |
| EGB241 | Electromagnetics and Machines |
| [ENB250 replac | ed by EGB241 in 2016.] |
| MAB127 | Mathematics for Engineering 2 |
| OR | |
| MXB107 | Introduction to Statistical Modelling |
| [MAB233 replace | ed by MXB107 in 2015. |
| Year 2 - Semes | ter 2 |
| ENB205 | Electrical and Compute Engineering |
| [ENB243 replac OPTIONS in 20 | ed by ENB205 or ELEC 16.] |
| IAB130 | Databases |
| | ed by IAB130 in 2014.] |
| CAB201 | Programming Principles |
| [INB270 replace | d by CAB201 in 2015.] |
| CAB202 | Microprocessors and Digital Systems |
| | ed by CAB202 in 2014.] |
| Year 3 - Semes | |
| ENB354 | Introduction To System Design |
| | Business of Information |
| IAB202 | Technology |
| | Technology d by IAB202 in 2016.] |
| | ed by IAB202 in 2016.] |
| [INB301 replace CAB302 | |
| [INB301 replace CAB302 | ed by IAB202 in 2016.] Software Development |
| [INB301 replace CAB302 [INB370 replace CAB301 | ed by IAB202 in 2016.] Software Development ed by CAB302 in 2015.] Algorithms and |
| [INB301 replace CAB302 [INB370 replace CAB301 | d by IAB202 in 2016.] Software Development d by CAB302 in 2015.] Algorithms and Complexity d by CAB301 in 2016.] |
| [INB301 replace CAB302 [INB370 replace CAB301 [INB371 replace | d by IAB202 in 2016.] Software Development d by CAB302 in 2015.] Algorithms and Complexity d by CAB301 in 2016.] |
| [INB301 replace CAB302 [INB370 replace CAB301 [INB371 replace Year 3 - Semes | ed by IAB202 in 2016.] Software Development ed by CAB302 in 2015.] Algorithms and Complexity ed by CAB301 in 2016.] ter 2 Advanced Systems |
| [INB301 replace CAB302 [INB370 replace CAB301 [INB371 replace Year 3 - Semes ENB355 CAB303 | ad by IAB202 in 2016.] Software Development ad by CAB302 in 2015.] Algorithms and Complexity ad by CAB301 in 2016.] ter 2 Advanced Systems Design |
| [INB301 replace CAB302 [INB370 replace CAB301 [INB371 replace Year 3 - Semes ENB355 CAB303 [INB251 replace CAB403 | ed by IAB202 in 2016.] Software Development ed by CAB302 in 2015.] Algorithms and Complexity ed by CAB301 in 2016.] ter 2 Advanced Systems Design Networks ed by CAB303 in 2015.] Systems Programming |
| [INB301 replace CAB302 [INB370 replace CAB301 [INB371 replace Year 3 - Semes ENB355 CAB303 [INB251 replace CAB403 | ad by IAB202 in 2016.] Software Development ad by CAB302 in 2015.] Algorithms and Complexity ad by CAB301 in 2016.] ter 2 Advanced Systems Design Networks ad by CAB303 in 2015.] Systems Programming ad by CAB403 in 2015.] |
| [INB301 replace CAB302 [INB370 replace CAB301 [INB371 replace Year 3 - Semes ENB355 CAB303 [INB251 replace CAB403 [INB365 replace MXB107 | ed by IAB202 in 2016.] Software Development ed by CAB302 in 2015.] Algorithms and Complexity ed by CAB301 in 2016.] ter 2 Advanced Systems Design Networks ed by CAB303 in 2015.] Systems Programming |



Bachelor of Engineering (Computer and Software Systems)

| ~ | |
|---|---|
| 1 | r |
| | |
| |) |

| Selective | |
|-------------------------------|---|
| Year 4 - Semes | ter 1 |
| BEB801 | Project 1 |
| OR | |
| INB309-1 | Major Project |
| ENB350 | Real-time Computer- based Systems |
| SEB701 | Work Integrated Learning 1 |
| Selective | |
| Year 4 - Semes | |
| CAB240 | Information Security |
| | ed by CAB240 in 2015.] |
| BEB802 | Project 2 |
| OR | |
| INB309-2 | Major Project |
| CAB210 | People Context and Technology |
| [INB272 replace | ed by CAB210 in 2014.] |
| IFB299 | IT Project Design and Development |
| | ed by IFB299 in 2015.] |
| Computer and Selectives | Software Systems |
| ENB242 | Introduction To Telecommunications |
| [ENB242 discor | ntinued in 2016.] |
| ENB344 | Industrial Electronics |
| ENB352 | Communication Environments For Embedded Systems |
| INB340 | Database Design |
| [INB340 discont | tinued in 2015.] |
| CAB340 | Cryptography |
| [INB355 replace | ed by CAB340 in 2015.] |
| INB373 | Web Application Development |
| [INB373 discont | inued in 2015.] |
| INB374 | Enterprise Software Architecture |
| [INB374 discont | - |
| CAB401 | High Performance and Parallel Computing |
| [INB375 replace | ed by CAB401 in 2016.] |
| INB381 | Modelling and Animation Techniques |
| IGB381 | Game Engine Technology |
| [INB382 replace | ed by IGB381 in 2017] |
| CRB040 | Learning Science Through Teaching |
| Any other unit a Coordinator. | pproved by Subject Area |



Bachelor of Engineering (Electrical)

Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | EN40 |
| CRICOS | 056529D |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Jacob Coetzee |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International Testing System) | English Language |
|---|------------------|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional recognition

Full professional accreditation from Engineers Australia has been given for this course.

Second Major and Minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

ELECTRICAL ENGINEERING Second Major and Minor Options

Second Major: Control Systems (previously Control and Manufacturing Engineering) Power and Energy Systems (previously Power Engineering) Signal Processing Telecommunications <u>Minors</u>: Electrical Engineering minor *plus* A minor from anywhere in QUT that is outside of the course (see <u>University</u> <u>Wide Minors</u>), or one of the Engineering Minors - Dynamics Minor, Materials and Design Minor, Robotics Minor or Thermofluids Minor.

Please note: The Work Integrated Learning unit (BEB701) and project units (BEB801, BEB802) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

Special Course Requirements

To graduate, students must complete at least 60 days industrial experience in an engineering environment as part of the Work Integrated Learning unit.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Honours

EN40 students who meet GPA requirements are eligible to be awarded Bachelor of Engineering with Honours. The Honours GPA requirements are set out in <u>MOPP – 5.2.5 Grading system –</u> <u>awards with honours and bachelor</u> <u>honours degrees</u>.

Domestic Course structure Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

You expand your knowledge of electrical engineering, and cover the fundamentals of analogue and digital electronics, and the approach to writing software to solve engineering problems. You are introduced



Bachelor of Engineering (Electrical)

to fundamental concepts in electronics, telecommunications and software design. You apply these concepts and are introduced to fundamentals of electrical engineering design.

Year 3

You increase your knowledge and skills in more advanced units in control, power systems, electronics, signal processing and telecommunications. You continue to develop your communication skills by writing assignment reports and presenting seminars. You choose a second study area.

Year 4

In your final year you complete your second study area. You undertake a major project which may be industry based and brings together all your previously mastered skills and advances your communication skills in report writing and seminar presentation. You will also complete your work integrated learning.

Second majors and minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

Please refer to the rules before making your selection.

Electrical engineering second major and minor options

Second major:

- Control Systems (previously Control and Manufacturing Engineering)
- Power and Energy Systems
- (previously Power Engineering)
- Signal Processing
- Telecommunications

Minors:

• Electrical Engineering minor

plus

• A minor from anywhere in QUT that is outside of the course.

Please note: The Work Integrated Learning unit (BEB701) and the project unit (BEB801) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

International Course structure

Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course

Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

You expand your knowledge of electrical engineering, and cover the fundamentals of analogue and digital electronics, and the approach to writing software to solve engineering problems. You are introduced to fundamental concepts in electronics, telecommunications and software design. You apply these concepts and are introduced to fundamentals of electrical engineering design.

Year 3

You increase your knowledge and skills in more advanced units in control, power systems, electronics, signal processing and telecommunications. You continue to develop your communication skills by writing assignment reports and presenting seminars. You choose a second study area.

Year 4

In your final year you complete your second study area. You undertake a major project which may be industry based and brings together all your previously mastered skills and advances your communication skills in report writing and seminar presentation. You will also complete your work integrated learning.

Second majors and minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

Please refer to the rules before making your selection.

Electrical engineering second major and minor options

Second major:

- Control Systems (previously Control and Manufacturing Engineering)
- Power and Energy Systems (previously Power Engineering)
- Signal Processing
- Telecommunications

Minors:

• Electrical Engineering minor

plus

• A minor from anywhere in QUT that is outside of the course.

Please note: The Work Integrated Learning unit (BEB701) and the project unit (BEB801) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

Sample Structure Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Please note:
- Year 4 Semester 1
- Year 4 Semester 2
- Electrical Engineering Selectives

| Code | Title |
|--|---|
| Year 1 - 5 | Semester 1 |
| EGB100 | Engineering Sustainability and Professional Practice |
| [ENB100 | replaced by EGB100 in 2015.] |
| ENB110 | Engineering Statics and Materials |
| EGB113 | Energy in Engineering Systems |
| [ENB130 | replaced by EGB113 in 2015.] |
| MZB125 | Introductory Engineering Mathematics |
| [MAB125 | replaced by MZB125 in 2015.] |
| OR | |
| MXB106 | Linear Algebra and Differential Equations |
| [MAB126 | replaced by MXB106 in 2015.] |
| | |
| Year 1 - S | Semester 2 |
| Year 1 - S EGB120 | Semester 2 Foundations of Electrical Engineering |
| EGB120 | Foundations of Electrical |
| EGB120 | Foundations of Electrical Engineering |
| EGB120 [ENB120 EGB111 Note: EN | Foundations of Electrical Engineering replaced by EGB120 in 2015.] Foundation of Engineering |
| EGB120 [ENB120 EGB111 Note: EN (sem 1 ur | Foundations of Electrical Engineering replaced by EGB120 in 2015.] Foundation of Engineering Design B150 is replaced by EGB111 hit) from 2015 - ng Unit Option (ENEN- |
| EGB120 [ENB120 EGB111 Note: EN (sem 1 ur Engineeri OPTIONS [Engineer | Foundations of Electrical Engineering replaced by EGB120 in 2015.] Foundation of Engineering Design B150 is replaced by EGB111 hit) from 2015 - ng Unit Option (ENEN- S) ing Unit Option replaces n 2015. See Engineering Unit |
| EGB120 [ENB120 EGB111 Note: ENI (sem 1 ur Engineeri OPTIONS [Engineer ENB200 i | Foundations of Electrical Engineering replaced by EGB120 in 2015.] Foundation of Engineering Design B150 is replaced by EGB111 hit) from 2015 - ng Unit Option (ENEN- S) ing Unit Option replaces n 2015. See Engineering Unit |
| EGB120 [ENB120 EGB111 Note: ENI (sem 1 ur Engineeri OPTIONS [Engineer ENB200 i Option Lis MXB106 | Foundations of Electrical Engineering replaced by EGB120 in 2015.] Foundation of Engineering Design B150 is replaced by EGB111 nit) from 2015 - ng Unit Option (ENEN- S) ing Unit Option replaces n 2015. See Engineering Unit st.] Linear Algebra and Differential |
| EGB120 [ENB120 EGB111 Note: ENI (sem 1 ur Engineeri OPTIONS [Engineer ENB200 i Option Lis MXB106 | Foundations of Electrical Engineering replaced by EGB120 in 2015.] Foundation of Engineering Design B150 is replaced by EGB111 nit) from 2015 - ng Unit Option (ENEN- S) ring Unit Option replaces n 2015. See Engineering Unit st.] Linear Algebra and Differential Equations |

MXB105 Calculus of One and Two Variables



Bachelor of Engineering (Electrical)

| | replaced by MXB105 in 2015.] |
|---|--|
| | Semester 1 |
| ENB240 | Introduction To Electronics |
| ENB246 | Engineering Problem Solving |
| Electrical OPTIONS | Selective Unit Option (ELEC- |
| | replaced by EGB241 or ELEC- |
| OPTIONS on plan) i | S (if both ENB250 and ENB343 n 2016.] |
| EGB240 | Electronic Design |
| [ENB245 | replaced by EGB240 in 2016.] |
| Year 2 - S | Semester 2 |
| EGB242 | Signal Analysis |
| | replaced by EGB242 in 2016.] |
| ENB205 | Electrical and Computer Engineering |
| | replaced by ENB205 or ELEC- |
| OPTIONS | S in 2016.] |
| CAB202 | Microprocessors and Digital Systems |
| [ENB244 | replaced by CAB202 in 2014.] |
| MXB105 | Calculus of One and Two Variables |
| [MAB127 | replaced by MXB105 in 2015.] |
| OR | |
| MXB107 | Introduction to Statistical Modelling |
| [MAB233 | replaced by MXB107 in 2015.] |
| | |
| Year 3 - S | Semester 1 |
| Year 3 - S ENB241 | Semester 1 Software Systems Design |
| | |
| ENB241 | Software Systems Design |
| ENB241 ENB301 | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and |
| ENB241 ENB301 ENB340 ENB342 | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms |
| ENB241 ENB301 ENB340 ENB342 Year 3 - S | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 |
| ENB241 ENB301 ENB340 ENB342 | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics |
| ENB241 ENB301 ENB340 ENB342 Year 3 - S ENB344 ENB345 | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice |
| ENB241 ENB301 ENB340 ENB342 Year 3 - S ENB344 ENB345 | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice |
| ENB241 ENB301 ENB340 ENB342 Year 3 - S ENB344 ENB345 | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice |
| ENB241 ENB301 ENB340 ENB342 Year 3 - S ENB344 ENB345 Second M MXB107 | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical |
| ENB241 ENB301 ENB340 ENB342 Year 3 - S ENB344 ENB345 Second M MXB107 | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical Modelling |
| ENB241 ENB301 ENB340 ENB342 Year 3 - S ENB344 ENB345 Second M MXB107 [MAB233 | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical Modelling |
| ENB241 ENB301 ENB340 ENB342 Year 3 - 3 ENB344 ENB345 Second M MXB107 [MAB233 OR | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical Modelling replaced by MXB107 in 2015.] |
| ENB241 ENB301 ENB340 ENB342 Year 3 - S ENB344 ENB345 Second M MXB107 [MAB233 OR Selective Please no | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical Modelling replaced by MXB107 in 2015.] |
| ENB241 ENB340 ENB342 Year 3 - S ENB344 ENB345 Second M MXB107 [MAB233 OR Selective Please no Students based Inc | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical Modelling replaced by MXB107 in 2015.] |
| ENB241 ENB340 ENB342 Year 3 - S ENB344 ENB345 Second M MXB107 [MAB233 OR Selective Please no Students based Inc the Subjet | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical Modelling replaced by MXB107 in 2015.] |
| ENB241 ENB301 ENB340 ENB342 Year 3 - 3 ENB344 ENB345 Second M MXB107 [MAB233 OR Selective Please no Students based Inc the Subje a program | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical Modelling replaced by MXB107 in 2015.] |
| ENB241 ENB301 ENB340 ENB342 Year 3 - S ENB344 ENB345 Second M MXB107 [MAB233 OR Selective Please no Students based Inc the Subjet a program | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical Modelling replaced by MXB107 in 2015.] |
| ENB241 ENB301 ENB340 ENB342 Year 3 - 3 ENB344 ENB345 Second M MXB107 [MAB233 OR Selective Please no Students based Ino the Subjet a program units BEE | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical Modelling replaced by MXB107 in 2015.] |
| ENB241 ENB301 ENB340 ENB342 Year 3 - 3 ENB344 ENB345 Second M MXB107 [MAB233 OR Selective Please no Students based Inc the Subje a program program units BEE BEB802 f 2. | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical Modelling replaced by MXB107 in 2015.] |
| ENB241 ENB301 ENB340 ENB342 Year 3 - 3 ENB344 ENB345 Second M MXB107 [MAB233 OR Selective Please no Students based Inc the Subje a program program units BEE BEB802 f 2. | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical Modelling replaced by MXB107 in 2015.] |
| ENB241 ENB301 ENB340 ENB342 Year 3 - S ENB344 ENB345 Second M MXB107 [MAB233 OR Selective Please no Students based Inc the Subje a program units BEE BEB802 f 2. Year 4 - S | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical Modelling replaced by MXB107 in 2015.] |
| ENB241 ENB301 ENB340 ENB342 Year 3 - 3 ENB344 ENB345 Second M MXB107 [MAB233 OR Selective Please no Students based Ino the Subjet a program units BEE BEB802 fi 2. Year 4 - 3 Second M | Software Systems Design Instrumentation and Control Power Systems and Machines Signals, Systems and Transforms Semester 2 Industrial Electronics Advanced Design and Professional Practice Major/Minor unit Introduction to Statistical Modelling replaced by MXB107 in 2015.] Ote: wishing to undertake CEED dustry Project should consult for the final year. CEED requires that you undertake 8701/SEB701, BEB801 and together in either Semester 1 or |

| | s to be replaced by the and IT Option list [ELECIT-] |
|------------|--|
| EGB241 | Electromagnetics and Machines |
| [ENB343 | replaced by EGB241 in 2016.] |
| Year 4 - S | Semester 2 |
| Second M | 1ajor/Minor unit |
| Second M | lajor/Minor unit |
| SEB701 | Work Integrated Learning 1 |
| [BEB701 | replaced by SEB701 in 2014.] |
| BEB802 | Project 2 |
| Electrical | Engineering Selectives |
| EGB339 | Introduction to Robotics |
| [ENB399 | replaced by EGB339 in 2016.] |
| ENB350 | Real-time Computer-based Systems |
| ENB352 | Communication Environments For Embedded Systems |
| ENB440 | RF Techniques and Modern Applications |
| ENB446 | Wireless Communications |
| ENB448 | Signal Processing and Filtering |
| ENB452 | Advanced Power Systems Analysis |
| ENB453 | Power Equipment and Utilisation |
| ENB454 | Power System Management |
| ENB455 | Power Electronics |
| ENB456 | Energy |
| ENB457 | Controls, Systems and Applications |
| ENB458 | Modern Control Systems |
| CRB040 | Learning Science Through Teaching |

ENB346 Digital Communications



Bachelor of Engineering (Mechanical)

Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | EN40 |
| CRICOS | 056529D |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Professor Ted Steinberg |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International Testing System) | English Language |
|---|------------------|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Second Major and Minors

You will have the opportunity to undertaken either a second major or two minors (see options below).

MECHANICAL ENGINEERING Second Major and Minor Options

<u>Second Major</u>: Motor Racing Engineering (previously Automotive Engineering) Engineering Management Heavy Mechanical Engineering

Minors: Mechanical Engineering minor *plus* A minor from anywhere in QUT that is outside of the course. (see <u>University</u> <u>Wide Minors</u>) Please note: The Work Integrated Learning unit (BEB701) and project units (BEB801, BEB802) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Mechanical) must complete at least 60 days of industrial experience/practice in an engineering environment as part of the Work Integrated Learning unit.

Honours

EN40 students who meet GPA requirements are eligible to be awarded Bachelor of Engineering with Honours. The Honours GPA requirements are set out in <u>MOPP – 5.2.5 Grading system –</u> <u>awards with honours and bachelor</u> <u>honours degrees</u>.

Domestic Course structure Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

You build your knowledge of engineering science in areas such as fundamentals of design, dynamics, fluid mechanics, manufacturing and mathematics. You also gain practical experience in our laboratories and are introduced to computational fluid dynamics (CFD). Your communication skills will also be advanced with an introduction to engineering drawing and assignment report writing.

Year 3

You increase your knowledge and skills in a number of professional areas, including



Bachelor of Engineering (Mechanical)

design, where you are introduced to solids modelling, materials and manufacture, instrumentation and control, dynamics, thermodynamics and stress analysis. You continue to develop your communication skills by writing assignment reports and presenting seminars. You choose a second study area.

Year 4

In your final year you complete your second study area. You undertake a major project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You will also undertake your work integrated learning.

Second majors and minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

Please refer to the rules before making your selection.

Mechanical engineering second major and minor options Second major:

- Motor Racing Engineering
- (previously Automotive Engineering)
- Engineering Management
- Heavy Mechanical Engineering

Minors:

Mechanical Engineering minor

plus

· A minor from anywhere in QUT that is outside of the course.

Please note: The Work Integrated Learning unit (BEB701) and the project unit (BEB801) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

International Course structure

Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course

Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics,

engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

You build your knowledge of engineering science in areas such as fundamentals of design, dynamics, fluid mechanics, manufacturing and mathematics. You also gain practical experience in our laboratories and are introduced to computational fluid dynamics (CFD). Your communication skills will also be advanced with an introduction to engineering drawing and assignment report writing.

Year 3

You increase your knowledge and skills in a number of professional areas, including design, where you are introduced to solids modelling, materials and manufacture, instrumentation and control, dynamics, thermodynamics and stress analysis. You continue to develop your communication skills by writing assignment reports and presenting seminars. You choose a second study area.

Year 4

In your final year you complete your second study area. You undertake a major project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You will also undertake your work integrated learning.

Second majors and minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

Please refer to the rules before making your selection.

Mechanical engineering second major and minor options Second major:

- Motor Racing Engineering (previously Automotive Engineering) Engineering Management
- Heavy Mechanical Engineering

Minors:

Mechanical Engineering minor

plus

 A minor from anywhere in QUT that is outside of the course.

Please note: The Work Integrated Learning unit (BEB701) and the project unit (BEB801) that are required for

professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

Sample Structure **Semesters**

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 Year 2 - Semester 2
- Please note:
- Year 3 Semester 1
- Year 3 Semester 2 Year 4 Semester 1
- Year 4 Semester 2
- Mechanical Engineering Selectives

| Code | Title |
|-----------------------|--|
| Year 1 - 8 | Semester 1 |
| EGB100 | Engineering Sustainability and Professional Practice |
| [ENB100 | replaced by EGB100 in 2015.] |
| ENB110 | Engineering Statics and Materials |
| EGB113 | Energy in Engineering Systems |
| [ENB130 | replaced by EGB113 in 2015.] |
| MZB125 | Introductory Engineering Mathematics |
| [MAB125 OR | replaced by MZB125 in 2015.] |
| UK | Lincor Algobro and Differential |
| MXB106 | Linear Algebra and Differential Equations |
| | replaced by MXB106 in 2015 26 in Semester 1.] |
| Year 1 - S | Semester 2 |
| EGB120 | Foundations of Electrical Engineering |
| [ENB120 | replaced by EGB120 in 2015.] |
| EGB111 | Foundation of Engineering Design |
| Note: EN (sem 1 ur | B150 is replaced by EGB111 hit) from 2015 - |
| Engineeri OPTIONS | ng Unit Option (ENEN- S) |
| | ing Unit Option replaces n 2015. See Engineering Unit st.] |
| MXB106 | Linear Algebra and Differential Equations |
| - | replaced by MXB106 in 2015 26 in Semester 1.] |
| OR | |
| MXB105 | Calculus of One and Two Variables |
| [MAB127 | replaced by MXB105 in 2015.] |
| | Semester 1 |
| EGB210 | Fundamentals of Mechanical Design |



Bachelor of Engineering (Mechanical)

| Bachel | or of Engineering (Mechan |
|---|--|
| [ENB215 | replaced by EGB210 in 2016.] |
| EGB314 | Strength of Materials |
| [ENB212 | replaced by EGB314 in 2016.] |
| EGB214 | Materials and Manufacturing |
| [ENB231 | replaced by EGB214 in 2016.] |
| MXB105 | Calculus of One and Two Variables |
| [MAB127 | replaced by MXB105 in 2015.] |
| OR | |
| MXB107 | Introduction to Statistical Modelling |
| | replaced by MXB107 in 2015.] |
| Year 2 - S | Semester 2 |
| ENB205 | Electrical and Computer Engineering |
| EGB211 | Dynamics |
| - | replaced by EGB211 in 2016.] |
| EGB323 | Fluid Mechanics |
| [ENB221 | |
| ENB331 | Materials and Manufacturing 2 |
| Please no | bte: |
| based Inc the Subje a program program units BEE | wishing to undertake CEED dustry Project should consult ect Area Coordinator to provide n for the final 2 years. CEED requires that you undertake 3701/SEB701, BEB801 and together in either Semester 1 or |
| Year 3 - S | Semester 1 |
| ENB222 | Thermodynamics 1 |
| ENB311 | Stress Analysis |
| | |
| ENB312 | Dynamics of Machinery |
| ENB316 | Design of Machine Elements |
| ENB316 Year 3 - S | Design of Machine Elements Semester 2 |
| ENB316 | Design of Machine Elements Semester 2 Automatic Control |
| ENB316 Year 3 - S | Design of Machine Elements Semester 2 Automatic Control Design and Maintenance of Machinery |
| ENB316 Year 3 - 3 ENB313 | Design of Machine Elements Semester 2 Automatic Control Design and Maintenance of |
| ENB316 Year 3 - 3 ENB313 ENB317 | Design of Machine Elements Semester 2 Automatic Control Design and Maintenance of Machinery |

| Selective | | |
|--------------------------------------|----------------------------|--|
| Year 4 - Semester 1 | | |
| BEB801 | Project 1 | |
| ENB421 | Thermodynamics 2 | |
| Second Major/Minor unit | | |
| Second Major/Minor unit | | |
| Year 4 - Semester 2 | | |
| SEB701 | Work Integrated Learning 1 | |
| [BEB701 replaced by SEB701 in 2014.] | | |
| BEB802 | Project 2 | |
| Second Major/Minor unit | | |

[MAB233 replaced by MXB107 in 2015.]

OR

Second Major/Minor unit

| Mechanical Engineering Selectives | | |
|-----------------------------------|--|--|
| ENB314 | Industrial Noise and Vibration | |
| ENB333 | Operations Management | |
| EGB336 | Lean Manufacturing | |
| [ENB336 | replaced by EGB336 in 2016.] | |
| EGB339 | Introduction to Robotics | |
| [ENB339 | replaced by EGB339 in 2016.] | |
| EGB422 | Energy Management | |
| [ENB422 | replaced by EGB422 in 2016.] | |
| EGB423 | Heating, Ventilation and Air Conditioning | |
| [ENB423 | replaced by EGB423 in 2016.] | |
| ENB432 | Engineering Asset Management and Maintenance | |
| [ENB432 | replaced by EGB432 in 2016.] | |
| EGB360 | Plant and Process Design | |
| [ENB433 | replaced by EGB360 in 2016.] | |
| EGB434 | Tribology | |
| [ENB434 | replaced by EGB434 in 2016.] | |
| ENB435 | Computer Integrated Manufacturing | |
| ENB477 | Facade Engineering | |
| CRB040 | Learning Science Through Teaching | |

QUT

Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | EN40 |
| CRICOS | 056529D |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Associate Professor Luis Alvarez |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.0 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing 6.0 | | |
| Speaking 6.0 | | |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Second Majors and Minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

MECHATRONICS Second Major and Minor Options

Second Major: Manufacturing Robotics <u>Minors</u>: Robotics Minor plus A minor from anywhere in QUT that is outside of the course. (see <u>University</u> <u>Wide Minors</u>)

Please note: The Work Integrated Learning unit (BEB701) and project units (BEB801, BEB802) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

Honours

EN40 students who meet GPA requirements are eligible to be awarded Bachelor of Engineering with Honours. The Honours GPA requirements are set out in <u>MOPP – 5.2.5 Grading system –</u> <u>awards with honours and bachelor</u> <u>honours degrees</u>.

Special Course Requirements

Students must obtain at least 60 days of industrial work experience in an engineering environment as part of the Work Integrated Learning unit.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

Build your knowledge of fundamental engineering science in areas such as design, dynamics, fluid mechanics, manufacturing and mathematics. You are introduced to technical computing which is a specialist requirement for information technology. You gain practical experience in our laboratories and are introduced to computational fluid dynamics (CFD). Your communication skills are advanced with an introduction to engineering drawing and report writing.



Year 3

You increase your knowledge and skills in professional areas including design and thermodynamics. You are exposed to specialist areas such as electronics, microprocessors and mechatronics, operations management and machines. Throughout this level you continue to develop your communication skills by writing assignment reports and presenting seminars.

Year 4

In your final year you further your skills in specialised areas such as mechatronic systems design, instrumentation and control and computer intelligence. You also undertake an industry-based project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You will also complete your work integrated learning.

Second majors and minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

Please refer to the rules before making your selection.

Mechatronics engineering second major and minor options Second major:

ManufacturingRobotics

Minors:

Robotics minor

plus

• A minor from anywhere in QUT that is outside of the course.

Please note: The Work Integrated Learning unit (BEB701) and the project unit (BEB801) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

International Course structure

Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

Build your knowledge of fundamental engineering science in areas such as design, dynamics, fluid mechanics, manufacturing and mathematics. You are introduced to technical computing which is a specialist requirement for information technology. You gain practical experience in our laboratories and are introduced to computational fluid dynamics (CFD). Your communication skills are advanced with an introduction to engineering drawing and report writing.

Year 3

You increase your knowledge and skills in professional areas including design and thermodynamics. You are exposed to specialist areas such as electronics, microprocessors and mechatronics, operations management and machines. Throughout this level you continue to develop your communication skills by writing assignment reports and presenting seminars.

Year 4

In your final year you further your skills in specialised areas such as mechatronic systems design, instrumentation and control and computer intelligence. You also undertake an industry-based project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You will also complete your work integrated learning.

Second majors and minors

You will have the opportunity to undertaken either a 2nd major or two minors (see options below).

Please refer <u>to the rules</u> before making your selection.

Mechatronics engineering second major and minor options Second major:

- Manufacturing
- Robotics

Minors:

Robotics minor

plus

• A minor from anywhere in QUT that is outside of the course.

Please note: The Work Integrated Learning unit (BEB701) and the project unit (BEB801) that are required for professional recognition and were once part of an applications minor have now been moved to the core of the Engineering course.

Sample Structure Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
 Vear 2 Semester 2
- Year 3 Semester 2
 Year 4 Semester 1
- Year 4 Semester 1
 Year 4 Semester 2
- Manufacturing 2nd Major Selectives

| Code | Title | |
|---|--|--|
| Year 1 - Semes | ter 1 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| [ENB100 replaced by EGB100 in 2015.] | | |
| EGB121 | Engineering Mechanics | |
| [ENB110 replaced by EGB121 in SEM-2 2015.] | | |
| EGB113 | Energy in Engineering Systems | |
| [ENB130 replace | ed by EGB113 in 2015.] | |
| MZB125 | Introductory Engineering Mathematics | |
| [MAB125 is rep 2015.] | aced by MZB125 in | |
| OR | | |
| MXB106 | Linear Algebra and Differential Equations | |
| [MAB126 replace | ed by MXB106 in 2015.] | |
| Year 1 - Semes | ter 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| [ENB120 replaced by EGB120 in 2015.] | | |
| EGB111 | Foundation of Engineering Design | |
| [ENB150 replaced by EGB111 in 2015.] | | |
| Engineering Unit Option (ENEN- OPTIONS) | | |
| [Engineering Unit Option replaces ENB200 in 2015. See Engineering Unit Option List] | | |
| MXB106 | Linear Algebra and Differential Equations | |
| [MAB126 replaced by MXB106 in 2015.] | | |

OR



Bachelor of Engineering (Mechatronics)

| Dachelor of | Engineering (Mechair |
|---------------------------------|--|
| MXB105 | Calculus of One and Two Variables |
| [MAB127 replace | ed by MXB105 in 2015.] |
| Year 2 - Semes | ter 1 |
| EGB211 | Dynamics |
| [ENB211 replac | ed by EGB211 in 2016.] |
| EGB220 | Mechatronics Design 1 |
| [ENB229 replac | ed by EGB220 in 2016.] |
| ENB240 | Introduction To Electronics |
| MXB105 | Calculus of One and Two Variables |
| [MAB127 replace | ed by MXB105 in 2015.] |
| OR | |
| MXB107 | Introduction to Statistical Modelling |
| [MAB233 replace | ed by MXB107 in 2015.] |
| Year 2 - Semes | ter 2 |
| EGB210 | Fundamentals of Mechanical Design |
| [ENB215 replace | ed by EGB210 in 2016.] |
| PLEASE NOTE unit. | : EGB210 is a SEM-1 |
| ENB205 | Electrical and Computer Engineering |
| [ENB243 replac OPTIONS in 20 | ed by ENB205 or ELEC- 16.] |
| CAB202 | Microprocessors and Digital Systems |
| [ENB244 replac | ed by CAB202 in 2014.] |
| EGB339 | Introduction to Robotics |
| [ENB339 replac | ed by EGB339 in 2016.] |
| OR | |
| MXB107 | Introduction to Statistical Modelling |
| [MAB233 replace | ed by MXB107 in 2015] |
| Year 3 - Semes | ter 1 |
| EGB314 | Strength of Materials |
| [ENB212 replac | ed by EGB314 in 2016.] |
| EGB214 | Materials and Manufacturing |
| [ENB231 replac | ed by EGB214 in 2016.] |
| ENB246 | Engineering Problem Solving |
| ENB301 | Instrumentation and Control |
| Year 3 - Semes | ter 2 |
| EGB323 | Fluid Mechanics |
| [ENB221 replace | ed by EGB323 in 2016.] |
| ENB329 | Mechatronics Project 2 |
| ENB331 | Materials and Manufacturing 2 |
| EGB339 | Introduction to Robotics |
| [ENB339 replace | ed by EGB339 in 2016.] |
| OR | |
| Selective | |
| | |

| Year 4 - Semes | ter 1 |
|------------------|--------------------------------------|
| BEB801 | Project 1 |
| DEDOUT | , |
| ENB334 | Design For Manufacturing |
| | • |
| ENB435 | Computer Integrated Manufacturing |
| Manufacturin a C | 0 |
| Manufacturing S | |
| Year 4 - Semes | |
| SEB701 | Work Integrated Learning 1 |
| [BEB701 replace | ed by SEB701 in 2014.] |
| BEB802 | Project 2 |
| | Operations |
| ENB333 | Management |
| ENB436 | Mechatronics System |
| EIND430 | Design |
| Manufacturing 2 | nd Major Selectives |
| Semester 1: | |
| ENB222 | Thermodynamics 1 |
| ENB350 | Real-time Computer- |
| ENDSOU | based Systems |
| ENB439 | Advanced Robotics |
| CAB320 | Artificial Intelligence |
| [INB860 replace | ed by CAB320 in 2015.] |
| Semester 2: | |
| | Communication |
| ENB352 | Environments For |
| | Embedded Systems |
| ENB457 | Controls, Systems and |
| ENB457 | Applications |
| | Modern Control |
| ENB458 | Systems |
| CAB201 | Programming Principles |
| [INB270 replace | ed by CAB201 in 2015.] |
| CRB040 | Learning Science |
| | Through Teaching |
| | |

Semesters

- Year 1 Semester 1
 Year 1 Semester 2
 Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
 Year 4 Semester 1
 Year 4 Semester 2
- Robotics 2nd Major Selectives -Depth Set
- Robotics 2nd Major Selectives -**Breadth Set**

| Code | Title |
|--------------------------------------|--|
| Year 1 - Semester 1 | |
| EGB100 | Engineering Sustainability and Professional Practice |
| [ENB100 replaced by EGB100 in 2015.] | |
| EGB121 | Engineering Mechanics |
| [ENB110 replac 2015.] | ed by EGB121 in SEM-2 |

| EGB113 | Energy in Engineering Systems |
|---|--|
| [ENB130 replace | ced by EGB113 in 2015.] |
| MZB125 | Introductory Engineering Mathematics |
| - | ced by MZB125 in 2015.] |
| OR | |
| MXB106 | Linear Algebra and Differential Equations |
| | ced by MXB106 in 2015.] |
| Year 1 - Semes | |
| EGB120 | Foundations of Electrical Engineering |
| [ENB120 replace | ced by EGB120 in 2015.] |
| EGB111 | Foundation of Engineering Design |
| [ENB150 replace | ced by EGB111 in 2015.] |
| Engineering Ur OPTIONS) | hit Option (ENEN- |
| | nit Option replaces 5. See Engineering Unit |
| MXB106 | Linear Algebra and Differential Equations |
| [MAB126 replat OR | ced by MXB106 in 2015.] |
| MXB105 | Calculus of One and Two Variables |
| [MAB127 repla | and by MYD405 in CEM 2 |
| | ced by MXB105 in SEM-2 |
| 2015.] Year 2 - Semes | - |
| 2015.] | - |
| 2015.] Year 2 - Semes EGB211 | ster 1 |
| 2015.] Year 2 - Semes EGB211 [ENB211 replace | ster 1 Dynamics |
| 2015.] Year 2 - Semes EGB211 [ENB211 replac EGB220 | ster 1 Dynamics ced by EGB211 in 2016.] |
| 2015.] Year 2 - Semes EGB211 [ENB211 replac EGB220 | ster 1 Dynamics ced by EGB211 in 2016.] Mechatronics Design 1 |
| 2015.] Year 2 - Semes EGB211 [ENB211 replac EGB220 [ENB229 replac | ster 1 Dynamics ced by EGB211 in 2016.] Mechatronics Design 1 ced by EGB220 in 2016.] Introduction To |
| 2015.] Year 2 - Semes EGB211 [ENB211 replac EGB220 [ENB229 replac ENB240 MXB105 | ster 1 Dynamics ced by EGB211 in 2016.] Mechatronics Design 1 ced by EGB220 in 2016.] Introduction To Electronics Calculus of One and |
| 2015.] Year 2 - Semes EGB211 [ENB211 replac EGB220 [ENB229 replac ENB240 MXB105 [MAB127 replac | ster 1 Dynamics Ced by EGB211 in 2016.] Mechatronics Design 1 Ced by EGB220 in 2016.] Introduction To Electronics Calculus of One and Two Variables |
| 2015.] Year 2 - Semes EGB211 [ENB211 replac EGB220 [ENB229 replac ENB240 MXB105 [MAB127 replac 2015.] | ster 1 Dynamics Ced by EGB211 in 2016.] Mechatronics Design 1 Ced by EGB220 in 2016.] Introduction To Electronics Calculus of One and Two Variables |
| 2015.] Year 2 - Semes EGB211 [ENB211 replace EGB220 [ENB229 replace ENB240 MXB105 [MAB127 replace 2015.] OR MXB107 [MAB233 replace 2015.] | ster 1 Dynamics Ded by EGB211 in 2016.] Mechatronics Design 1 Ced by EGB220 in 2016.] Introduction To Electronics Calculus of One and Two Variables Ced by MXB105 in SEM-2 Introduction to Statistical Modelling Ced by MXB107 in SEM-2 |
| 2015.] Year 2 - Semes EGB211 [ENB211 replac EGB220 [ENB229 replac ENB240 MXB105 [MAB127 replac 2015.] OR MXB107 [MAB233 replac | ster 1 Dynamics ced by EGB211 in 2016.] Mechatronics Design 1 ced by EGB220 in 2016.] Introduction To Electronics Calculus of One and Two Variables ced by MXB105 in SEM-2 Introduction to Statistical Modelling ced by MXB107 in SEM-2 |
| 2015.] Year 2 - Semes EGB211 [ENB211 replace EGB220 [ENB229 replace ENB240 MXB105 [MAB127 replace 2015.] OR MXB107 [MAB233 replace 2015.] | ster 1 Dynamics Ded by EGB211 in 2016.] Mechatronics Design 1 Ced by EGB220 in 2016.] Introduction To Electronics Calculus of One and Two Variables Ced by MXB105 in SEM-2 Introduction to Statistical Modelling Ced by MXB107 in SEM-2 |
| 2015.] Year 2 - Semes EGB211 [ENB211 replac EGB220 [ENB229 replac ENB240 MXB105 [MAB127 replac 2015.] OR MXB107 [MAB233 replac 2015.] Year 2 - Semes EGB210 [ENB215 replac | ster 1 Dynamics ced by EGB211 in 2016.] Mechatronics Design 1 ced by EGB220 in 2016.] Introduction To Electronics Calculus of One and Two Variables ced by MXB105 in SEM-2 Introduction to Statistical Modelling ced by MXB107 in SEM-2 ster 2 Fundamentals of |
| 2015.] Year 2 - Semes EGB211 [ENB211 replac EGB220 [ENB229 replac ENB240 MXB105 [MAB127 replac 2015.] OR MXB107 [MAB233 replac 2015.] Year 2 - Semes EGB210 [ENB215 replac PLEASE NOTE | ster 1 Dynamics |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=EN40&courseID=33455. CRICOS No.00213J

QUI

Bachelor of Engineering (Mechatronics)

| Dachelor of | |
|---|---|
| CAB202 | Microprocessors and Digital Systems |
| [ENB244 replace | ed by CAB202 in 2014.] |
| EGB339 | Introduction to Robotics |
| [ENB339 replace | ed by EGB339 in 2016.] |
| OR | |
| MXB107 | Introduction to Statistical Modelling |
| [MAB233 replace 2015.] | ed by MXB107 in SEM-2 |
| Year 3 - Semes | ter 1 |
| EGB314 | Strength of Materials |
| [ENB212 replace | ed by EGB314 in 2016.] |
| EGB214 | Materials and Manufacturing |
| [ENB231 replace | ed by EGB214 in 2016.] |
| ENB246 | Engineering Problem Solving |
| ENB301 | Instrumentation and Control |
| Year 3 - Semes | ter 2 |
| ENB329 | Mechatronics Project 2 |
| ENB458 | Modern Control Systems |
| EGB339 | Introduction to Robotics |
| [ENB339 replace | ed by EGB339 in 2016.] |
| OR | |
| Breadth Selectiv | ve |
| | |
| Depth Selective | |
| Depth Selective Year 4 - Semes | |
| • | |
| Year 4 - Semes BEB801 ENB439 | ter 1 Project 1 Advanced Robotics |
| Year 4 - Semes BEB801 ENB439 | ter 1 Project 1 |
| Year 4 - Semes BEB801 ENB439 Two Selectives | ter 1 Project 1 Advanced Robotics from Depth or Breadth |
| Year 4 - Semes BEB801 ENB439 Two Selectives Set | ter 1 Project 1 Advanced Robotics from Depth or Breadth |
| Year 4 - Semes BEB801 ENB439 Two Selectives Set Year 4 - Semes SEB701 | ter 1 Project 1 Advanced Robotics from Depth or Breadth ter 2 Work Integrated |
| Year 4 - Semes BEB801 ENB439 Two Selectives Set Year 4 - Semes SEB701 | ter 1 Project 1 Advanced Robotics from Depth or Breadth ter 2 Work Integrated Learning 1 |
| Year 4 - Semes BEB801 ENB439 Two Selectives Set Year 4 - Semes SEB701 [BEB701 replac BEB802 | ter 1 Project 1 Advanced Robotics from Depth or Breadth ter 2 Work Integrated Learning 1 ed by SEB701 in 2014.] |
| Year 4 - Semes BEB801 ENB439 Two Selectives Set Year 4 - Semes SEB701 [BEB701 replac BEB802 Two Selectives Set | ter 1 Project 1 Advanced Robotics from Depth or Breadth ter 2 Work Integrated Learning 1 ed by SEB701 in 2014.] Project 2 |
| Year 4 - Semes BEB801 ENB439 Two Selectives Set Year 4 - Semes SEB701 [BEB701 replac BEB802 Two Selectives Set Robotics 2nd M | ter 1 Project 1 Advanced Robotics from Depth or Breadth ter 2 Work Integrated Learning 1 ed by SEB701 in 2014.] Project 2 from Depth or Breadth |
| Year 4 - Semes BEB801 ENB439 Two Selectives Set Year 4 - Semes SEB701 [BEB701 replac BEB802 Two Selectives Set Robotics 2nd M Set | ter 1 Project 1 Advanced Robotics from Depth or Breadth ter 2 Work Integrated Learning 1 ed by SEB701 in 2014.] Project 2 from Depth or Breadth ajor Selectives - Depth |
| Year 4 - Semes BEB801 ENB439 Two Selectives Set Year 4 - Semes SEB701 [BEB701 replac BEB802 Two Selectives Set Robotics 2nd M Set ENB312 | ter 1 Project 1 Advanced Robotics from Depth or Breadth ter 2 Work Integrated Learning 1 ed by SEB701 in 2014.] Project 2 from Depth or Breadth ajor Selectives - Depth Dynamics of Machinery Design of Machine |
| Year 4 - Semes BEB801 ENB439 Two Selectives Set Year 4 - Semes SEB701 [BEB701 replac BEB802 Two Selectives Set Robotics 2nd M Set ENB312 ENB316 | ter 1 Project 1 Advanced Robotics from Depth or Breadth ter 2 Work Integrated Learning 1 ed by SEB701 in 2014.] Project 2 from Depth or Breadth ajor Selectives - Depth Dynamics of Machinery Design of Machine Elements Signals, Systems and |
| Year 4 - Semes BEB801 ENB439 Two Selectives Set Year 4 - Semes SEB701 [BEB701 replac BEB802 Two Selectives Set Robotics 2nd M Set ENB312 ENB316 ENB342 | ter 1 Project 1 Advanced Robotics from Depth or Breadth ter 2 Work Integrated Learning 1 ed by SEB701 in 2014.] Project 2 from Depth or Breadth ajor Selectives - Depth Dynamics of Machinery Design of Machine Elements Signals, Systems and Transforms |
| Year 4 - Semes BEB801 ENB439 Two Selectives Set Year 4 - Semes SEB701 [BEB701 replac BEB802 Two Selectives Set Robotics 2nd M Set ENB312 ENB316 ENB342 ENB344 | ter 1 Project 1 Advanced Robotics from Depth or Breadth ter 2 Work Integrated Learning 1 ed by SEB701 in 2014.] Project 2 from Depth or Breadth ajor Selectives - Depth Dynamics of Machinery Design of Machine Elements Signals, Systems and Transforms Industrial Electronics Communication Environments For |
| Year 4 - Semes BEB801 ENB439 Two Selectives Set Year 4 - Semes SEB701 [BEB701 replac BEB802 Two Selectives Set Robotics 2nd M Set ENB312 ENB316 ENB344 ENB352 ENB441 | ter 1 Project 1 Advanced Robotics from Depth or Breadth ter 2 Work Integrated Learning 1 ed by SEB701 in 2014.] Project 2 from Depth or Breadth ajor Selectives - Depth Dynamics of Machiney Elements Signals, Systems and Transforms Industrial Electronics Communication Environments For Embedded Systems Applied Image |
| Year 4 - Semes BEB801 ENB439 Two Selectives Set Year 4 - Semes SEB701 [BEB701 replac BEB802 Two Selectives Set Robotics 2nd M Set ENB312 ENB316 ENB344 ENB352 ENB441 | ter 1 Project 1 Advanced Robotics from Depth or Breadth ter 2 Work Integrated Learning 1 ed by SEB701 in 2014.] Project 2 from Depth or Breadth ajor Selectives - Depth Dynamics of Machinery Design of Machine Elements Signals, Systems and Transforms Industrial Electronics Communication Environments For Embedded Systems Applied Image Processing |

| ENB457 | Controls, Systems and Applications | |
|---|--------------------------------------|--|
| CAB320 | Artificial Intelligence | |
| [INB860 replaced by CAB320 in 2015.] | | |
| Robotics 2nd Major Selectives - Breadth Set | | |
| EGB323 | Fluid Mechanics | |
| [ENB221 replaced by EGB323 in 2016.] | | |
| ENB222 | Thermodynamics 1 | |
| ENB241 | Software Systems Design | |
| EGB242 | Signal Analysis | |
| [ENB242 replaced by EGB242 in 2016.] | | |
| EGB415 | Motor Racing Vehicle Design | |
| [ENB315 replaced by EGB415 in 2016.] | | |
| ENB350 | Real-time Computer- based Systems | |
| IAB130 | Databases | |



Bachelor of Engineering (Medical)

Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | EN40 |
| CRICOS | 056529D |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Devakar Epari |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Special Course Requirements

Students must obtain at least 60 days of industrial employment in an engineering environment as part of the Work Integrated Learning unit. Half of this experience must be in an industry related to Biomedical Engineering.

Honours

EN40 students who meet GPA requirements are eligible to be awarded Bachelor of Engineering with Honours. The Honours GPA requirements are set out in <u>MOPP – 5.2.5 Grading system –</u> <u>awards with honours and bachelor</u> <u>honours degrees</u>.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

You build your knowledge of engineering science in areas such as fundamentals of design, dynamics, computer technology, fluid mechanics and mathematics. You are introduced to human anatomy which is a specialist requirement for medical engineering. You gain practical experience in our laboratories and are introduced to computational fluid dynamics (CFD). Your communication skills are advanced with an introduction to engineering drawing and assignment report writing.

Year 3

You increase your knowledge and skills in professional areas including thermodynamics and stress analysis. You are exposed to specialist areas such as biomedical engineering design, biofluids, biomaterials and human physiology. Throughout this level you will continue to develop your communication skills by writing assignment reports and presenting seminars. You also gain further professional learning in ethics and legislation.

Year 4

In your final year you further your knowledge in specialised areas such as modelling and simulation, biomedical instrumentation, instrumentation and control, and engineering asset



Bachelor of Engineering (Medical)

management. You undertake a major project which brings together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You will also complete your work integrated learning.

Minors

For professional recognition you will undertake an applications minor which consists of a workplace intergrated learning unit, a project unit and two specialised engineering units.

International Course structure

Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Your course

Year 1

Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2

You build your knowledge of engineering science in areas such as fundamentals of design, dynamics, computer technology, fluid mechanics and mathematics. You are introduced to human anatomy which is a specialist requirement for medical engineering. You gain practical experience in our laboratories and are introduced to computational fluid dynamics (CFD). Your communication skills are advanced with an introduction to engineering drawing and assignment report writing.

Year 3

You increase your knowledge and skills in professional areas including thermodynamics and stress analysis. You are exposed to specialist areas such as biomedical engineering design, biofluids, biomaterials and human physiology. Throughout this level you will continue to develop your communication skills by writing assignment reports and presenting seminars. You also gain further professional learning in ethics and legislation.

Year 4

In your final year you further your knowledge in specialised areas such as modelling and simulation, biomedical instrumentation, instrumentation and control, and engineering asset management. You undertake a major project which brings together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You will also complete your work integrated learning.

Minors

For professional recognition you will undertake an applications minor which consists of a workplace intergrated learning unit, a project unit and two specialised engineering units.

Sample Structure

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
 Year 3 Semester 1
- Year 3 Semester 1
- Year 4 Semester 1
- Year 4 Semester 2
- Medical Engineering Selectives

| Code | Title | |
|---|--|--|
| Year 1 - Semest | er 1 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| [ENB100 replaced by EGB100 in 2015.] | | |
| ENB110 | Engineering Statics and Materials | |
| EGB113 | Energy in Engineering Systems | |
| [ENB130 replace | ed by EGB113 in 2015.] | |
| MZB125 | Introductory Engineering Mathematics | |
| [MAB125 replaced by MZB125 in 2015.] | | |
| OR | | |
| MXB106 | Linear Algebra and Differential Equations | |
| [MAB126 replaced by MXB106 in 2015 or MZB126 in Semester 1.] | | |
| Year 1 - Semester 2 | | |
| EGB120 | Foundations of Electrical Engineering | |
| [ENB120 replaced by EGB120 in 2015.] | | |
| EGB111 | Foundation of Engineering Design | |
| Note: ENB150 is replaced by EGB111 (sem 1 unit) from 2015 - | | |
| Engineering Unit Option (ENEN- OPTIONS) | | |

[Engineering Unit Option replaces ENB200 in 2015. See Engineering Unit Option List.] Linear Algebra and **MXB106** Differential Equations [MAB126 replaced by MXB106 in 2015 or MZB126 in Semester 1.] OR Calculus of One and **MXB105** Two Variables [MAB127 replaced by MXB105 in 2015.] Year 2 - Semester 1 [ENB215 replaced by EGB210 in 2016.] Fundamentals of **EGB210** Mechanical Design EGB314 Strength of Materials [ENB212 replaced by EGB314 in 2016.] LSB131 Anatomy Calculus of One and **MXB105 Two Variables** [MAB127 replaced by MXB105 in 2015.] OR Introduction to **MXB107** Statistical Modelling [MAB233 replaced by MXB107 in 2015.] Year 2 - Semester 2 Electrical and **ENB205** Computer Engineering EGB211 **Dynamics** [ENB211 replaced by EGB211 in 2016.] EGB323 Fluid Mechanics [ENB221 replaced by EGB323 in 2016.] LSB231 Physiology Year 3 - Semester 1 **ENB222** Thermodynamics 1 **ENB311** Stress Analysis Biomechanical **ENB319** Engineering Design Materials and EGB214 Manufacturing [ENB231 replaced by EGB214 in 2016.] Year 3 - Semester 2 **ENB313** Automatic Control Biomechanical **ENB318** Engineering Systems **ENB338 Biomaterials ENB322 Biofluids** Year 4 - Semester 1 **BEB801** Project 1 Modelling and **ENB335** Simulation for Medical Engineers Asset Management and **EGB432** Maintenance [ENB432 replaced by EGB432 in 2016.] Introduction to **MXB107**



Bachelor of Engineering (Medical)

| | Statistical Modelling | |
|--------------------------------------|---|--|
| [MAB233 replaced by MXB107 in 2015.] | | |
| OR | | |
| Selective | | |
| Year 4 - Semest | ter 2 | |
| SEB701 | Work Integrated Learning 1 | |
| [BEB701 replace | ed by SEB701 in 2014.] | |
| BEB802 | Project 2 | |
| ENB437 | Health Legislation in the Medical Environment | |
| PCB605 | Biomedical Instrumentation | |
| Medical Enginee | ering Selectives | |
| BSB115 | Management | |
| MXB103 | Introductory Computational Mathematics | |
| [MAB220 replace | ed by MXB103 in 2014.] | |
| MAB422 | Mathematical Modelling | |
| [MAB422 discontinued in 2015.] | | |
| PCB593 | Digital Image Processing | |
| PCN211 | Physics of Medical Imaging | |
| PYB100 | Foundation Psychology | |
| SCB384 | Forensic Sciences - From Crime Scene to Court | |
| [SCB384 discontinuted in 2014.] | | |
| CRB040 | Learning Science Through Teaching | |



Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | EN40 |
| CRICOS | 056529D |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Thomas Rainey |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

A Process Engineer develops and optimises industrial processes to make the huge range of products on which modern society depends. Process engineering involves refining, renewing or modifying raw materials. In today's world, processing efficiently, sustainably and with a low energy footprint is key to business operations and profitability.

Career Outcomes

The degree will develop responsible professionals with a sense of social awareness, leadership skills and problem solving. QUT has very strong industry links in Process Engineering and has current practicing Process and Chemical Engineers teaching into this course which will provide opportunities for site visits, work integrated learning and research projects.

A degree in Process Engineering will

equip students for a wide variety of employment. Process Engineers are predominantly employed in the following sectors/sub-sectors:

- Oil and Gas Production
- Mining
- Refining
- Mineral Processing
- Chemical and Petrochemicals
- Metal Production
- Food Processing
- Electricity Supply
- Pharmaceuticals

- Bio-process industries such as Biofuels and Waste Product Processing

Professional membership

Graduates of this course will be eligible to apply for full professional membership of Engineers Australia

Honours

EN40 students who meet GPA requirements are eligible to be awarded Bachelor of Engineering with Honours. The Honours GPA requirements are set out in <u>MOPP – 5.2.5 Grading system –</u> <u>awards with honours and bachelor</u> <u>honours degrees</u>.

Minors

You will have the opportunity to undertake a minor from anywhere in QUT that is outside of the course (see <u>University</u> <u>Wide Minors</u>) or one of the Engineering Minors - Dynamics Minor, Materials and Design Minor, Robotics Minor or Thermofluids Minor.

Domestic Course structure Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

International Course structure

Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Bachelor of Engineering (Process Engineering)

Sample Structure

Semesters

- Year 1 Semester 1
 Year 1 Semester 2
 Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- ٠
- Year 3 Semester 2 Year 4 Semester 1 ٠
- Year 4 Semester 2 •

Tal

| Code | Title | |
|--|--|--|
| Year 1 - Semester 1 | | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| [ENB100 replace | ed by EGB100 in 2015.] | |
| EGB121 | Engineering Mechanics | |
| [ENB110 replaced by EGB121 in SEM-2 2015.] | | |
| EGB113 | Energy in Engineering Systems | |
| [ENB130 replace | ed by EGB113 in 2015.] | |
| MZB125 | Introductory Engineering Mathematics | |
| [MAB125 replace OR | ed by MZB125 in 2015.] | |
| MXB106 | Linear Algebra and Differential Equations | |
| [MAB126 replace | ed by MXB106 in 2015.] | |
| Year 1 - Semest | | |
| 500400 | Foundations of | |
| EGB120 | Electrical Engineering | |
| [ENB120 replace | ed by EGB120 in 2015] | |
| EGB111 | Foundation of Engineering Design | |
| [ENB150 replaced by EGB111 in 2015.] | | |
| Engineering Unit | t Option (ENEN- | |
| [Engineering Unit Option replaces ENB200 in 2015. See Engineering Unit Option List.] | | |
| MXB106 | Linear Algebra and Differential Equations | |
| [MAB126 replace | ed by MXB106 in 2015.] | |
| OR | | |
| MXB105 | Calculus of One and Two Variables | |
| [MAB127 replaced by MXB105 in SEM-2 2015.] | | |
| Year 2 - Semester 1 | | |
| CVB221 | Unit Operations | |
| ENB222 | Thermodynamics 1 | |
| EGB214 | Materials and Manufacturing | |
| [ENB231 replaced by EGB214 in 2016] | | |
| MXB107 | Introduction to | |

| | Statistical Modelling |
|-----------------------|---|
| [MAB233 replac | ed by MXB107 in 2015] |
| Year 2 - Semest | er 2 |
| CVB101 | General Chemistry |
| CVB211 | Industrial Chemistry |
| EGB323 | Fluid Mechanics |
| [ENB221 replace | ed by EGB323 in 2016.] |
| EGB260 | Operations Management and Process Economics |
| [ENB260 replace | ed by EGB260 in 2016.] |
| PLEASE NOTE: unit. | EGB260 is a SEM-1 |
| Year 3 - Semest | er 1 |
| ENB360 | Heat and Mass Transfer Operations |
| ENB362 | Bulk Materials Handling |
| EGB363 | Safety and Environmental Management |
| [ENB363 replace | ed by EGB363 in 2016.] |
| Minor unit | |
| Year 3 - Semest | er 2 |
| CVB102 | Chemical Structure and Reactivity |
| ENB313 | Automatic Control |
| ENB361 | Minerals and Minerals Processing |
| Minor unit | |
| Year 4 - Semest | er 1 |
| BEB801 | Project 1 |
| ENB460 | Advanced Process Modelling |
| ENB461 | Advanced Process Control Systems |
| Minor unit | |
| Year 4 - Semest | er 2 |
| SEB701 | Work Integrated Learning 1 |
| [BEB701 replace | ed by SEB701 in 2014.] |
| BEB802 | Project 2 |
| EGB360 | Plant and Process Design |
| [ENB433 replace | ed by EGB360 in 2016.] |
| Minor unit | |





Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | EN40 |
| CRICOS | 056529D |
| Duration (full-time) | 4 years |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Wayne Kelly |

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

The course is a collaborative program between the areas of Engineering and Information Technology which provides students with the electrical engineering and software development skills to seek employment as software engineers. The engineering component consists of studies in electronic systems engineering while the information technology component concentrates on software engineering. These studies integrate into a cohesive course which gives a wide and advanced study of modern electronic and computing systems. This degree produces computer and electronic engineers especially suited for the development and application of electronic systems and computer systems in all areas of industry.

Career Outcomes

Software Engineers create, maintain and modify computer and software programs such as operating systems or communications software. They may also evaluate and deploy new programming tools and techniques and analyse current software products. You may work in a range of occupational environments. Software engineers can work in Engineering/IT-specific industries, as well as in other organisations requiring software engineering expertise.

Professional Recognition

Full professional accreditation from

Engineers Australia and the Australian Computer Society has been given for this course.

Minors

For professional recognition you will undertake an Applications minor which consists of a Work Place Integrated Learning unit, a project unit and two specialised engineering units.

Special course requirements

Students are required to complete 60 days approved industrial experience as part of the Work Integrated Learning unit.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Minors

For professional recognition you will undertake an Applications minor which consists of a Work Place Integrated Learning unit, a project unit and two specialised engineering units.

International Course structure

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator as part of the Work Integrated Learning unit.

Bachelor of Information Technology

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | IN01 |
| CRICOS | 012656E |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$30,000 per year full-time (96 credit points) |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry - ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
 - Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

This degree equips you to build and apply creative, innovative IT solutions across diverse industries. A hands-on, real world based curriculum gives you the opportunity to explore a wide range of areas within IT, and gain deep understanding within your chosen area specialty, such as networking, software development, data warehousing, business processes, information management, web technologies, or digital societies. You experience an innovative, hands-on approach to learning through projects where you develop IT systems. You will be able to gain entrepreneurial skills if you wish to learn how to develop an idea into a commercial opportunity. You learn to harness your creativity and people skills to maximise the impact of your technical know-how relative to the IT marketplace. It positions you for a challenging and rewarding career within the global economy.

Course Design

Requirements for the completion of IN01 Bachelor of Information Technology(Study Area A) are as follows:

(a) 72 credit points (6 units) of IT Core units, which includes 24 credit points (2 units) of Option Units selected from an approved list.

(b) 120 credit points (10 units) of Major Core units

(c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set); or two Minors (4 unit set each); or one Minor (4 unit set) plus 4 elective units.

Majors

Choose your primary area of study, also known as your major, in the following specialisation areas: Information Systems or Computer Science.

Options List

The Bachelor of Information Technology Core Unit Options List comprises a range of units from which you choose to undertake two (2). You are able to undertake these options in any semester. The options include introductory units from a wide variety of disciplines offered at QUT.

Complementary Studies

Students may elect to undertake a Second Major (8 unit set), or two Minors (4 unit set each), or one Minor (4 unit set) plus 4 elective units.

Second Major:

A choice of one second major from:

- Technology Innovation and Design
- Computational and Simulation Science

Minors:

A choice of two minors from either Faculty or University Wide Options.

Professional Recognition

Professional recognition can be found in the individual majors of the Bachelor of Information Technology (IN01).

Pathways for Further Study

The QUT Bachelor of Information Technology is located at Level 7 of the Australian Qualifications Framework (AQF). Eligible graduates may continue their studies in these disciplines with an additional honours year in (IN10) Bachelor of Information Technology (Honours).



Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | IN01 |
| CRICOS | 012656E |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$30,000 per year full-time (96 credit points) |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry - ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Wayne Kelly |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Overview

Computer science is the scientific and practical approach to computer-based system design, development and operation. Its subfields range from the fundamental principles of computation through to tools and techniques for IT system development and evaluation. It includes identifying and solving systems design issues associated with achieving critical properties such as correctness, efficiency, robustness, usability and security. Its application extends into specialised areas including mobile computing, artificial intelligence, robotics, and large-scale information management involving information retrieval and web search engines.

Career Outcomes

Computer Science graduates will: •be experienced in the principles and practice of software development; • be familiar with the principles and operation of networked systems; and • have a sound understanding of the shared foundations underlying all modern computer-based technologies.

In addition, depending on their choice of optional study areas, they will have the opportunity to gain specific expertise in Information Security, Networks and Communications, Intelligent Systems, Data-Centric Computing, or Human-Computer Interaction.

Course Design

Your QUT Bachelor of Information Technology (Computer Science) degree consists of 288 credit points (24 units) arranged as follows:

a) 72 credit points (6 units) of Computer Science Core units, which includes 2 units from a selected options list.

b) 120 credit points (10 units) of Computer Science discipline units

c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set); or two Minors (4 unit set each); or one Minor (4 unit set) plus 4 elective units.

Computer Science Core Units

These units will engage you in understanding Computer Science from a practical approach with an understanding of a range of disciplinary and multidisciplinary perspectives. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning to apply this knowledge in practical systems development projects.

Computer Science Major Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher order thinking to an advanced level.

Complementary Studies Options

Second Major:

A choice of one second major from:

•Technology Innovation and Design

Second Major

•Computational and Simulation Science Second Major



Minors:

A choice of two minors from the lists below:

Business Process Management Minor

- •Data-Centric Computing Extension Minor
- •Information Systems Minor
- •Enterprise Systems Minor
- •Human-Computer Interaction Minor •Intelligent Systems Minor
- Mobile Applications Minor
- •Networks and Security Minor
- •Social Technology Minor
- •Software Development for IS and Games
- Minor •Technology Innovation Minor
- •University Wide Minors

Professional membership

Graduates are eligible for membership of the ACS (Australian Computer Society)

Domestic Course structure

Requirements for the completion of IN01 Bachelor of Information Technology (Study Area A) are as follows:

- 72 credit points (6 units) of information technology core units, which includes 12 credit point (1 unit) of option unit* selected from an approved list
- 120 credit points (10 units) of major core units
- 96 credit points of complementary studies comprising of either a second major (8 unit set); or two minors (4 unit set each); or one minor (4 unit set) plus 4 elective units.

*Unit options list - comprises a range of units from which you choose to undertake one unit. You are able to undertake the option unit in any semester. The options include introductory units from a wide variety of disciplines offered at QUT.

International Course structure

Requirements for the completion of IN01 Bachelor of Information Technology (Study Area A) are as follows:

- 72 credit points (6 units) of information technology core units, which includes 12 credit point (1 unit) of option unit* selected from an approved list
- 120 credit points (10 units) of major core units
- 96 credit points of complementary studies comprising of either a second major (8 unit set); or two minors (4 unit set each); or one minor (4 unit set) plus 4 elective units.

*Unit options list - comprises a range of units from which you choose to undertake one unit. You are able to undertake the option unit in any semester. The options include introductory units from a wide variety of disciplines offered at QUT.

Sample Structure Semesters

- Year 1, Semester 1
- SELECT MAJOR
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
 Vear 3, Semester 1
- Year 3, Semester 1
 Year 3, Semester 2

| Code | Title |
|--------------------|--|
| Year 1, Semester 1 | |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| SELECT MAJOR | |

Students should select their major prior to enrolling in their Core Option Units

| to enrolling in their Core Option Units | | |
|---|--|--|
| Year 1, Semester | Year 1, Semester 2 | |
| CAB201 | Programming Principles | |
| CAB202 | Microprocessors and Digital Systems | |
| IFB130 | Database Management | |
| Core Unit Option | | |
| Year 2, Semester | 1 | |
| CAB203 | Discrete Structures | |
| CAB302 | Software Development | |
| 2nd Major/Minor u | nit | |
| 2nd Major/Minor u | nit | |
| Year 2, Semester | 2 | |
| CAB303 | Networks | |
| IFB299 | IT Project Design and Development | |
| 2nd Major/Minor u | nit | |
| 2nd Major/Minor u | nit | |
| Year 3, Semester 1 | | |
| CAB301 | Algorithms and Complexity | |
| IFB398 | Capstone Project (Phase 1) | |
| 2nd Major/Minor unit | | |
| CS Major Elective | choice from: | |
| CAB402 | Programming Paradigms | |
| CAB401 | High Performance | |
| | | |

| | and Parallel Computing | |
|-----------------------------|-------------------------------|--|
| CAB403 | Systems Programming | |
| Year 3, Semester 2 | | |
| | | |
| IFB399 | Capstone Project (Phase 2) | |
| IFB399 2nd Major/Minor u | (Phase 2) | |
| | (Phase 2) nit | |



Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | IN01 |
| CRICOS | 012656E |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$30,000 per year full-time (96 credit points) |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry - ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Erwin Fielt |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Overview

Information systems focuses on identifying organisational requirements for applications and acquiring effective systems solutions, whether custom designed and built or selected and implemented, to meet the requirements. Skills involve the design and development of large database applications for business, as well as the purchase and implementation of packaged software addressing business problems. It does not require in-depth knowledge of computer programming but rather indepth specialised knowledge of databases and software used in business or of the means to analyse business needs and, in partnership with the systems users, design solutions to the inefficiencies or ineffectiveness of business processes.

Career Outcomes

Information Systems graduates will have skills in design, systems thinking, stakeholder engagement and modelling and abstraction which position them to work as Business Analysts, IS Consultants, solving a range of organisational problems.

In addition, depending on their choice of optional study areas, they will have the opportunity to gain specific expertise in Business Process Management, Social Media, Mobile Application Development or Services & Solutions undertaken through complementary minors. Specific skills in Service and Outcomes Management can be gained in the complementary minor called Service and Outcomes Management, which positions graduates for IT management roles within organisations.

Finally, further knowledge of and skills in design and innovation can be gained in the secondary major of Systems Innovation, which will lead to careers as IT innovators within enterprises, consulting companies or in their own start-ups.

Course Design

Your QUT Bachelor of Information Technology (Information Systems) degree consists of 288 credit points (24 units) arranged as follows:

a) 72 credit points (6 units) of Information Systems Core units, which includes 2 units from a selected options list.

b) 120 credit points (10 units) of Information Systems discipline units.

c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set); or two Minors (4 unit set each); or one Minor (4 unit set) plus 4 elective units.

Information Systems Core Units

These units will engage you in understanding Information Systems from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Information Systems Major Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced

Bachelor of Information Technology (Information Systems)

graduate level units. They focus on developing your knowledge, practice and higher order thinking to an advanced level.

Complementary Studies Options

Second Major:

A choice of one second major from:

•Technology Innovation and Design Second Major

•Computational and Simulation Science Second Major

Minors:

A choice of two minors from the lists below:

•Business Process Management Minor

- •Computer Science Minor
- •Enterprise Systems Minor
- •Human-Computer Interaction Minor
- Information Systems
- *Intelligent Systems Minor
- Mobile Applications Minor
- •Networks and Security Minor
- Social Technology Minor
- •Software Development for IS and Games
- Minor
- Technology Innovation Minor
- University Wide Minors

Professional Recognition

Graduates are eligible for membership of the ACS (Australian Computer Society)

Domestic Course structure

Requirements for the completion of IN01 Bachelor of Information Technology (Study Area A) are as follows:

- 72 credit points (6 units) of information technology core units, which includes 12 credit point (1 unit) of option unit* selected from an approved list
- 120 credit points (10 units) of major core units
- 96 credit points of complementary studies comprising of either a second major (8 unit set); or two minors (4 unit set each); or one minor (4 unit set) plus 4 elective units.

*Unit options list - comprises a range of units from which you choose to undertake one unit. You are able to undertake this option in any semester. The options include introductory units from a wide variety of disciplines offered at QUT.

International Course structure

Requirements for the completion of IN01 Bachelor of Information Technology (Study Area A) are as follows:

- 72 credit points (6 units) of information technology core units, which includes 12 credit point (1 unit) of option unit* selected from an approved list
- 120 credit points (10 units) of major core units
- 96 credit points of complementary studies comprising of either a second major (8 unit set); or two minors (4 unit set each); or one minor (4 unit set) plus 4 elective units.

*Unit options list - comprises a range of units from which you choose to undertake one unit. You are able to undertake this option in any semester. The options include introductory units from a wide variety of disciplines offered at QUT.

Sample Structure Semesters

- Year 1, Semester 1
- SELECT MAJOR
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
 Year 3, Semester 1
- Year 3, Semester 2
- rear 3, Semester

| Code | Title | |
|--|--|--|
| Year 1, Semester 1 | | |
| IFB101 | Impact of IT | |
| IFB102 | Computer Technology Fundamentals | |
| IFB103 | Designing for IT | |
| IFB104 | Building IT Systems | |
| SELECT MAJOR | | |
| Students should select their major prior to enrolling in their Core Option Units | | |
| Year 1, Semester 2 | | |
| IFB130 | Database Management | |
| Core Unit Option | | |
| | | |
| IAB201 | Modelling Information Systems | |
| IAB201 IAB202 | Information | |
| | Information Systems Business of Information | |
| IAB202 | Information Systems Business of Information | |

2nd Major/Minor unit

| 2nd Major/Minor unit | |
|--------------------------------------|--|
| Year 2, Semester 2 | |
| IT Project Design and Development | |
| Corporate Systems | |
| it | |
| it | |
| | |
| Capstone Project (Phase 1) | |
| IS Major Elective choice from: | |
| Information Systems Consulting | |
| Business Intelligence | |
| Project Management | |
| it | |
| 2nd Major/Minor unit | |
| Year 3, Semester 2 | |
| Capstone Project (Phase 2) | |
| Enterprise Architecture | |
| | |
| | |

2nd Major/Minor unit



Handbook

| Vee | 204.0 |
|-----------------------------------|--|
| Year | 2018 |
| QUT code | IN05 |
| CRICOS | 092648J |
| Duration (full-time) | 3 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,600 per year full-time (96 credit points) |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Ross Brown; email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |

Domestic Assumed

knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | IN05 |
| CRICOS | 092648J |
| Duration (full-time) | 3 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,600 per year full-time (96 credit points) |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Ross Brown; email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Sorin Oancea |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
 - Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure

Requirements for the completion of IN05 Bachelor of Games and Interactive Environments (Study Area A) are as follows:

- 72 credit points (6 units) of games and interactive environments core units, which includes 24 credit points (2 units) of option units* selected from an approved list.
- 120 credit points (10 units) of Major core units
- 96 credit points of complementary studies comprising of either a second major; or two minors (4 unit set each); or one minor (4 unit set) plus 48 credit points of elective units.

* Unit options list - comprises a range of units from which you choose to undertake two (2). The core option choices provide you with space in your course to explore other fields such as within Games and Interactive Environment, Information Technology. These units can be used to complement your Major studies or, explore which areas you may choose for your complementary studies.

International Course structure

Requirements for the completion of IN05 Bachelor of Games and Interactive Environments (Study Area A) are as follows:

- 72 credit points (6 units) of games and interactive environments core units, which includes 24 credit points (2 units) of option units* selected from an approved list.
- 120 credit points (10 units) of Major core units
- 96 credit points of complementary studies comprising of either a second major; or two minors (4 unit set each); or one minor (4 unit set) plus 48 credit points of elective units.

* Unit options list - comprises a range of units from which you choose to undertake two (2). The core option choices provide you with space in your course to explore other fields such as within Games and Interactive Environment, Information Technology. These units can be used to complement your Major studies or, explore which areas you may choose for your complementary studies.

Sample Structure

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2 Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
 Year 3, Semester 2

| Code | Title |
|-----------------------|--|
| Year 1, Semester | 1 |
| IGB180 | Computer Games Studies |
| IGB181 | Game Production and Technology |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| Year 1, Semester 2 | |
| KNB135 | Animation Aesthetics |
| KNB127 | CGI Foundations |
| Core Unit Option unit | |
| Core Unit Option unit | |
| Year 2 Semester 1 | |
| IGB100 | Game Studio 1: Mini- Game Development |
| KNB137 | Digital Worlds |
| 2nd Major/Minor unit | |

| 2nd Major/Minor unit | |
|----------------------|---|
| Year 2, Semester 2 | |
| IGB200 | Game Studio 2: Applied Game Development |
| KNB227 | CGI Technologies |
| 2nd Major/Minor Unit | |
| 2ndMajor/Minor Unit | |
| Year 3, Semester 1 | |
| IGB300 | Capstone Project (Game Design) |
| KNB217 | Digital Creatures |
| 2nd Major/Minor Unit | |
| 2nd Major/Minor Unit | |
| Year 3, Semester 2 | |
| IGB301 | Capstone Project (Game Development) |
| IGB400 | Game Studio 3: Game Innovation |
| 2nd Major/Minor Unit | |
| 2nd Major/Minor Unit | |



Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | IN05 |
| CRICOS | 092648J |
| Duration (full-time) | 3 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,600 per year full-time (96 credit points) |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Ross Brown; email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
 - Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking 6.0 | |

Domestic Course structure

Requirements for the completion of IN05 Bachelor of Games and Interactive Environments (Study Area A) are as follows:

- 72 credit points (6 units) of games and interactive environments core units, which includes 24 credit points (2 units) of option units* selected from an approved list.
- 120 credit points (10 units) of Major core units
- 96 credit points of complementary studies comprising of either a second major; or two minors (4 unit set each); or one minor (4 unit set) plus 48 credit points of elective units.

* Unit options list - comprises a range of units from which you choose to undertake two (2). The core option choices provide you with space in your course to explore other fields such as within Games and Interactive Environment, Information Technology. These units can be used to complement your Major studies or, explore which areas you may choose for your complementary studies.

International Course structure

Requirements for the completion of IN05 Bachelor of Games and Interactive Environments (Study Area A) are as follows:

- 72 credit points (6 units) of games and interactive environments core units, which includes 24 credit points (2 units) of option units* selected from an approved list.
- 120 credit points (10 units) of Major core units
- 96 credit points of complementary studies comprising of either a second major; or two minors (4 unit set each); or one minor (4 unit set) plus 48 credit points of elective units.

* Unit options list - comprises a range of units from which you choose to undertake two (2). The core option choices provide you with space in your course to explore other fields such as within Games and Interactive Environment, Information Technology. These units can be used to complement your Major studies or, explore which areas you may choose for your complementary studies.

Sample Structure

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2

| Code | Title |
|-----------------------|-------------------------------------|
| Year 1, Semester | 1 |
| IGB180 | Computer Games Studies |
| IGB181 | Game Production and Technology |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| Year 1, Semester 2 | |
| IGB220 | Fundamentals of Game Design |
| DXB304 | Interactive Narrative Design |
| Core Unit Option unit | |
| Core Unit Option unit | |
| Year 2, Semester 1 | |
| DXB303 | Programming for Visual Designers |
| IGB100 | Game Studio 1: Mini- |



Bachelor of Games and Interactive Environments (Game Design)

| | Game Development |
|---|---|
| IGB320 | Game Design in Different Contexts |
| 2nd Major/Minor u | unit |
| Year 2, Semester 2 | |
| IGB200 | Game Studio 2: Applied Game Development |
| IGB321 | Immersive Game Level Design |
| 2nd Major/Minor unit | |
| 2nd Major/Minor u | ınit |
| Year 3, Semester 1 | |
| Year 3, Semester | 1 |
| Year 3, Semester | 1 Capstone Project (Game Design) |
| | Capstone Project (Game Design) |
| IGB300 | Capstone Project (Game Design) unit |
| IGB300 2nd Major/Minor u | Capstone Project (Game Design) unit unit |
| IGB300 2nd Major/Minor u 2nd Major/Minor u | Capstone Project (Game Design) unit unit unit |
| IGB300 2nd Major/Minor u 2nd Major/Minor u 2nd Major/Minor u | Capstone Project (Game Design) unit unit unit |
| IGB300 2nd Major/Minor u 2nd Major/Minor u 2nd Major/Minor u Year 3, Semester | Capstone Project (Game Design) unit unit 2 Capstone Project |
| IGB300 2nd Major/Minor u 2nd Major/Minor u 2nd Major/Minor u Year 3, Semester IGB301 | Capstone Project (Game Design) unit unit 2 Capstone Project (Game Development) Game Studio 3: Game Innovation |



Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | IN05 |
| CRICOS | 092648J |
| Duration (full-time) | 3 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,600 per year full-time (96 credit points) |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Ross Brown; email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
 - Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure

Requirements for the completion of IN05 Bachelor of Games and Interactive Environments (Study Area A) are as follows:

- 72 credit points (6 units) of games and interactive environments core units, which includes 24 credit points (2 units) of option units* selected from an approved list.
- 120 credit points (10 units) of Major core units
- 96 credit points of complementary studies comprising of either a second major; or two minors (4 unit set each); or one minor (4 unit set) plus 48 credit points of elective units.

* Unit options list - comprises a range of units from which you choose to undertake two (2). The core option choices provide you with space in your course to explore other fields such as within Games and Interactive Environment, Information Technology. These units can be used to complement your Major studies or, explore which areas you may choose for your complementary studies.

International Course structure

Requirements for the completion of IN05 Bachelor of Games and Interactive Environments (Study Area A) are as follows:

- 72 credit points (6 units) of games and interactive environments core units, which includes 24 credit points (2 units) of option units* selected from an approved list.
- 120 credit points (10 units) of Major core units
- 96 credit points of complementary studies comprising of either a second major; or two minors (4 unit set each); or one minor (4 unit set) plus 48 credit points of elective units.

* Unit options list - comprises a range of units from which you choose to undertake two (2). The core option choices provide you with space in your course to explore other fields such as within Games and Interactive Environment, Information Technology. These units can be used to complement your Major studies, or explore which areas you may choose for your complementary studies.

Sample Structure

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
 Year 3, Semester 2

| Code | Title |
|-----------------------|---------------------------------------|
| Year 1, Semester | 1 |
| IGB180 | Computer Games Studies |
| IGB181 | Game Production and Technology |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| Year 1, Semester 2 | |
| CAB201 | Programming Principles |
| IGB283 | Game Engine Theory and Application |
| Core Unit Option unit | |
| Core Unit Option unit | |
| Year 2, Semester | 1 |
| CAB301 | Algorithms and Complexity |
| IGB100 | Game Studio 1: Mini- |



| | Game Development | |
|----------------------|---|--|
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 2, Semester 2 | | |
| IGB200 | Game Studio 2: Applied Game Development | |
| IGB381 | Game Engine Technology | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 1 | | |
| IGB383 | AI for Games | |
| IGB300 | Capstone Project (Game Design) | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 2 | | |
| IGB301 | Capstone Project (Game Development) | |
| IGB400 | Game Studio 3: Game Innovation | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| | | |

~

-



Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | IT04 |
| CRICOS | 059710E |
| Duration (full-time) | 3 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| International fee (indicative) | 2017: \$28,000 per year full-time (96 credit points) |
| Total credit points | 288 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Ross Brown; ph: +61 7 3138 9481; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement.

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Update

This course will be offered in 2014, however the course structure is being redeveloped and is subject to university approval.

For course updates please visit www.qut.edu.au/coursechanges

Why Choose This Course

This course is a collaboration between the faculties of Science and Engineering, and Creative Industries, allowing you to be taught design and technology skills from the experts in their field.

Massive cultural changes are occuring due to the advent of consumer 3D technology. This has changed the expectations and abilities of people, creating more jobs for the industry.

Queensland is leading the video game industry with figures showing the State earns more than any other from interactive entertainment. The State's game developers generate approximately \$55 million per year; a 40 per cent slice of Australia's video games earnings, according to an Australian Bureau of Statistics report. Queensland game companies also employ almost half of the video game industry's workforce, with Brisbane becoming a hub of games talent, producing games for a worldwide audience.

Popular games titles produced in Queensland include Hellboy, Fruit Ninja, the children's game Viva Pinata Party Animals and Star Wars: The Force Unleashed.

Course Structure

The 24-unit degree comprises:

- seven (7) core units including a 24credit-point final-year project
- eight units in your chosen major
- four units in a secondary area of study, also known as your minor

• four optional units where you can choose units from across QUT to complement your studies.

MAJORS

Choose your primary area of study, also known as your major, from:

Animation This major includes foundation studies in the production of animation and motion graphics; history of animation practices; and programming which includes object orientation, 3D computer graphics and computer generated art. You will develop skills enabling you to work in areas such as computer games, interactive media arts, web applications, sound design, adaptive music and interactive public art works.

Game Design This major provides you with hands-on game design experience, as well as knowledge of narrative and immersion (drawing the player into the game), and game-level design to provide the skills necessary to create interesting and unique game worlds.

Software Technologies This major will prepare you for careers in the game and simulation industries such as software tester, video game tester, game programmer and software tools developer. You will study technological aspects of computer games, games engine and tools development. Companies used to provide 'in-house' training for programming skills, however they are now turning to tertiary institutions to provide appropriately qualified graduates.



Bachelor of Games and Interactive Entertainment

MINORS

- Animation
- Advanced Animation*
- Digital Media
- Entrepreneurship
- Game Design
- Legal Issues
- Marketing
- Mathematics for Games
- Mobile and Network Technologies
- Physics for Games
- Software Technologies
- Advanced Software Technologies^
- Sound Design

*Only available to those undertaking the animation major.

^Only available to those undertaking the software technologies major.

Professional Recognition

The Software Technologies major within this course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Your Course Year 1

In your first year you will undertake five core units, consisting of:

- Computer Games Studies
- Building IT Systems
- Industry Insights
- Introducing Design
- Games Production

You will also undertake three units within your chosen major or minor.

Year 2

Second year consists of units within your chosen major and minor together with electives chosen from anywhere in the University.

Year 3

In your final year, you will extend your professional and technical skills by participating in a major group project to produce a significant piece of digital work using PC, mobile devices, consoles or virtual reality. You will also undertake a Bachelor of Games and Interactive Entertainment design project. You will complete your units for your chosen major, minor and optional units.

Cooperative Education Program

The Cooperative Education Program gives students the opportunity of 10-12 months paid industry placement during your course where they can integrate real experience with what they are learning in their degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNITAB, RACQ and many Queensland Government departments.

Students participating in this program enrol in INS011 Cooperative Education 1 and INS012 Cooperative Education 2 in the second semester of the program. The cooperative education program and its mentoring and assessment requirements make up the required contact and assessment of both units. Eligibility criteria apply. International students are not eligible due to visa restrictions.

Part-time students who are working in a professional position related to the BGIE may be able to use their current employment to meet the criteria for completing INS011 Cooperative Edcation 1, after completion of 168 credit points in the Bachelor of Games and Interactive Entertainment, subject to meeting eligibility criteria. Further information about this option is available from Student Services, Level 3, O Block Podium, Gardens Point Campus.

Find out more about the <u>Cooperative</u> <u>Education Program</u>.

Unit Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:

Undergraduate Translation Table

If you have completed the unit(s) listed under the "Translation Unit Codes" column you are not permitted to enrol in the listed new code.

Credit for Previous Study

Domestic and international applicants may claim credit for part of the degree, on the basis of completed or partially completed studies, related to the Bachelor of IT.

International students can access advanced standing arrangements on <u>QUT's international site.</u>

Domestic applicants should view the credit information on the <u>Student Services</u> <u>site.</u>

Domestic Course structure

The 24-unit degree comprises:

- five core units plus a 36-credit-point final-year project (three units equivalent)
- eight units in your chosen major
- · four units in a secondary area of

study, also known as your minor

 four optional units where you can choose units from across QUT to complement your studies.

Majors

Choose your primary area of study, also known as your major, from:

Animation

This major includes foundation studies in the production of animation and motion graphics; history of animation practices; and programming, which includes object orientation, 3D computer graphics and computer-generated art. You will develop skills enabling you to work in areas such as computer games, interactive media arts, web applications, sound design, adaptive music and interactive public art works.

Game design

This major provides you with hands-on game design experience, as well as knowledge of narrative and immersion (drawing the player into the game), and game-level design to provide the skills necessary to create interesting and unique game worlds.

Software technologies

This major will prepare you for careers in the game and simulation industries such as software tester, video game tester, game programmer and software tools developer. You will study technological aspects of computer games, games engine and tools development. Companies used to provide 'in-house' training for programming skills; however they are now turning to tertiary institutions to provide appropriately qualified graduates.

Minors

- Animation
- Advanced animation*
- Digital media
- Entrepreneurship
- Game design
- Marketing
- Mobile and network technologies
- Software technologies
- Advanced software technologies^
- Sound design

*Only available to those undertaking the animation major.

^Only available to those undertaking the software technologies major.

Your course

Year 1

In your first year you will undertake five core units, consisting of:

Computer games studies



Bachelor of Games and Interactive Entertainment

- · Building IT systems
- Impact of IT
- Design IT
- · Games production.

You will also undertake three units within your chosen major or minor.

Year 2

Second year consists of units within your chosen major and minor together with optional units chosen from anywhere in the University.

Year 3

In your final year, you will extend your professional and technical skills by participating in a major group project to produce a significant piece of digital work using PC, mobile devices, consoles or virtual reality. You will also undertake a Bachelor of Games and Interactive Entertainment design project. You will complete your units for your chosen major, minor and optional units.

International Course structure

Course structure

The 24-unit degree comprises:

- five core units plus a 36-credit-point final-year project (three units equivalent)
- eight units in your chosen major
- four units in a secondary area of study, also known as your minor
- four optional units where you can choose units from across QUT to complement your studies.

Majors

Choose your primary area of study, also known as your major, from:

Animation

This major includes foundation studies in the production of animation and motion graphics; history of animation practices; and programming which includes object orientation, 3D computer graphics and computer-generated art. You will develop skills enabling you to work in areas such as computer games, interactive media arts, web applications, sound design, adaptive music and interactive public art works.

Game Design

This major provides you with hands-on game design experience, as well as knowledge of narrative and immersion (drawing the player into the game), and game-level design to provide the skills necessary to create interesting and unique game worlds.

Software Technologies

This major will prepare you for careers in the game and simulation industries such as software tester, video game tester, game programmer and software tools developer. You will study technological aspects of computer games, games engine and tools development. Companies used to provide 'in-house' training for programming skills; however they are now turning to tertiary institutions to provide appropriately qualified graduates.

Minors

- Animation
- Advanced Animation* Digital Media
- Entrepreneurship
- Game Design
- Marketing
- Mobile and Network Technologies
- Software Technologies
- Advanced Software Technologies^ Sound Design

Your course

Year 1

In your first year you will

undertake five core units,

consisting of:

- Computer Games Studies
- Building IT Systems
- Impact of IT
- Design IT
- Games Production.

You will also undertake three units within your chosen major or minor.

Year 2

Second year consists of units within your chosen major and minor together with optional units chosen from anywhere in the University.

Year 3

In your final year, you will extend your professional and technical skills by participating in a major group project to produce a significant piece of digital work using PC, mobile devices, consoles or virtual reality. You will also undertake a Bachelor of Games and Interactive Entertainment design project. You will complete your units for your chosen major, minor and optional units.

*Only available to those undertaking the animation major.

^Only available to those undertaking the software technologies major.

Sample Structure

Semesters

- The course consists of four blocks of studies
- Year 1, Semester 1
- Year 1, Semester 2 •
- Year 2, Semester 1 .
- Year 2, Semester 2 Year 3, Semester 1
- Year 3, Semester 2

Code

The course consists of four blocks of studies

Block A: Core Studies (7 units including a 24 credit point Project)

Title

Block B: Major (8 units) selected from Animation; Games Design; Sotware **Technologies**

Block C: Minor (4 units)

Block D: Electives (4 units)

The Cooperative Education Programs are replacements for general IT electives

| Year 1, Semester | 1 | |
|-------------------------------------|--|--|
| IFB103 | Designing for IT | |
| IFB104 | Building IT Systems | |
| IGB180 | Computer Games Studies | |
| [INB180 replaced | by IGB180 in 2017] | |
| IFB102 | Computer Technology Fundamentals | |
| [IFB102 replaced | by IGB181 in 2017] | |
| Year 1, Semester | 2 | |
| IFB101 | Impact of IT | |
| Block B Unit | | |
| Block B Unit | | |
| Block B or Block C | C or Block D Unit | |
| Year 2, Semester | 1 | |
| Block B or Block C | C or Block D Unit | |
| Block B or Block C or Block D Unit | | |
| Block B or Block C or Block D Unit | | |
| Block B or Block C or Block D Unit | | |
| Year 2, Semester | | |
| Block B or Block C or Block D Unit | | |
| Block B or Block C or Block D Unit | | |
| Block B or Block C or Block D Unit | | |
| Block B or Block C or Block D Unit | | |
| Year 3, Semester 1 | | |
| IGB300 | Capstone Project (Game Design) | |
| [INB379 replaced by IGB300 in 2018] | | |
| Block B or Block C or Block D Unit | | |
| Block B or Block C or Block D Unit | | |
| Block B or Block C or Block D Unit | | |
| Year 3, Semester | 2 | |



Bachelor of Games and Interactive Entertainment

| IGB301 | Capstone Project (Game Development) | |
|--|--|--|
| IGB400 | Game Studio 3: Game Innovation | |
| [INB380 (24CP) replaced by IGB301 and IGB400 in 2018] | | |
| Block B or Block C or Block D Unit | | |
| Block B or Block C or Block D Unit | | |
| Note: Coop Ed students replace INB380 | | |

with INS011 and INS012



Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | IT06 |
| CRICOS | 059712C |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 12 |
| Rank | 75 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 288 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Ph: +61 7 3138 8822; Email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (English (4, SA) and Maths A, B or C (4, SA)).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Why Choose This Course

You may have a great idea for new mobile software, a new way to conduct business over the net, or even how a business could out-manoeuvre its competitors using information technology. You know the importance of IT and you are excited about what IT can do and either want to develop the next big thing yourself or be able to evaluate, identify, choose and integrate from myriad technologies to arrive at a creative solution. This degree will equip you with the knowledge and skills to realise these aspirations. Whether as a professional within an organisation, as a consultant, or as an entrepreneur, you will be well equipped to take advantage of the demand for business-savvv IT professionals who are able to creatively develop or identify IT solutions to help organisations adapt and grow.

Course Structure

The 24-unit degree comprises: • 16 core units that build your understanding of the relationships between information, technology, business and people • eight units in a specialisation of your choice – you could choose to further specialise in information technology, a set of units from a different discipline, or optional units from across QUT to complement your studies. Specialisation options include:

- adult and community learning
- business systems engineering
- construction management –
 administration
- creative industries management
- databases
- entrepreneurship
- finance
- forensics
- human resource management
- organisational psychology
- information systems
- information management/information technology management
- international studies
- law
- management
- marketing
- public health

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Your Course

Year 1

In your first semester, you will complete the first four core units:

- Impact of IT
- Industry Insights
- Corporate Systems
- Organisational Databases.

In your second semester, you will complete three more core units:

- Management, People and Organisations
- Project Management Practice
- Information Systems Development.

You will also choose your specialisation and complete your first specialisation unit, or start your electives.

Year 2

In first semester, you will complete three core units:

- Business Analysis
- Technology Management
- Creating New Enterprises.

You will also complete your second specialisation unit or electives.

In second semester, you will complete two core units:

- Marketing
- Web Sites for Electronic Commerce.

You will also complete two more specialisation units or electives.



Year 3

In your first semester, you will complete two core units:

- Enterprise Systems Applications
- Information Systems Consulting.

You will also complete two more specialisation units or electives.

In your second semester, you will complete the last two core units:

Business Process Modelling

• Corporate Systems Management Project (your final-year showcase project).

You will also complete the last two units of your specialisation or electives.

Course Requirements

Block A: Core Units 16 Units (includes an industry-based project)

Block B: Complementary Studies Students can select unit set(s) from within the Science and Engineering Faculty or from those offered by other Faculties at QUT. Some options for complementary studies are listed in this document. Alternatively, students may select to take up to 8 elective units with the approval of the Course Coordinator.

If you require assistance in selecting your IT Complementary Studies please contact your Course Coordinator.

UNIT SELECTION PROCESS

• Determine which units you are yet to complete

• Check that you meet the prerequisite requirements for these units

• Check the availability of the unit in the given semester

• Enrol in the appropriate units and ensure you have nominated your major via your online enrolment page

NOTE: It is the student's responsibility to ensure that the correct enrolment program is nominated and prerequisite requirements are met for selected units. Assistance with planning your enrolment is available from Student Services, Level 3, O Block Podium, Gardens Point campus.

Cooperative Education Program

The Cooperative Education Program gives students the opportunity of 10-12 months paid industry placement during your course where they can integrate real experience with what they are learning in their degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNITAB, RACQ and many Queensland Government departments. Students participating in this program enrol in INB300 Professional Practice in IT in the first semester of the program and in INB325 Corporate Systems Management Project in the second semester of the program. The cooperative education program and its mentoring and assessment requirements make up the required contact and assessment components of both units. Eligibility criteria apply. International students are not eligible due to visa restrictions.

Part-time students who are working in a professional IT position may be able to use their current employment to meet the criteria for completing INB300 Professional Practice in IT, after completion of 168 credit points in the Bachelor of Corporate Systems Management component, subject to meeting eligibility criteria. Further information about this option is available from Student Services, Level 3, O Block Podium, Gardens Point campus or see the unit outline for INB300.

Find out more about the <u>Cooperative</u> <u>Education Program</u>.

Unit Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:

Undergraduate Translation Table

If you have completed the unit(s) listed under the "Translation Unit Codes" column you are not permitted to enrol in the listed new code.

Intermediate Level Electives

If you have not completed ITB008 you will need to replace it with one of the following intermediate level elective units.

- INB120 Corporate Systems
- INB220 Business Analysis
- INB255 Security
- INB272 Interaction Design

Or, an INB300 level unit as approved by the course coordinator

Domestic Course structure Course structure

The 24-unit degree comprises:

• 16 core units that build your understanding of the relationships between information, technology, business and people eight units in a specialisation of your choice – you could choose to further specialise in information technology, a set of units from a different discipline, or optional units from across QUT to complement your studies.

Specialisation options include:

- adult and community learning
- business systems engineering
- construction management administration
- creative industries management
- databases
- entrepreneurship
- finance
- forensics
- human resource management
- organisational psychology
- information systems
- information management/information technology management
- international studies
- law
- management
- marketing
- public health.

Your course

Year 1

In your first semester, you will complete the first four core units:

- Impact of IT
- Industry Insights
- Corporate Systems
- Organisational Databases.

In your second semester, you will complete three more core units:

- Management, People and
- Organisations
- Project Management Practice
- Information Systems Development.

You will also choose your specialisation and complete your first specialisation unit, or start your electives.

Year 2

In first semester, you will complete three core units:

- Business Analysis
- Technology Management
- Creating New Enterprises.

You will also complete your second specialisation unit or electives.

In second semester, you will complete two core units:

- Marketing
- Web Sites for Electronic Commerce.

You will also complete two more specialisation units or electives.

Year 3

In your first semester, you will complete



Bachelor of Corporate Systems Management

two core units:

- Enterprise Systems Applications
- Information Systems Consulting.

You will also complete two more specialisation units or electives.

In your second semester, you will complete the last two core units:

- Business Process Modelling
- Corporate Systems Management Project (your final-year showcase project).

You will also complete the last two units of your specialisation or electives.

International Course structure

Course structure

The 24-unit degree comprises:

- 16 core units that build your understanding of the relationships between information, technology, business and people
- eight units in a specialisation of your choice – you could choose to further specialise in information technology, a set of units from a different discipline, or optional units from across QUT to complement your studies.

Specialisation options include:

- adult and community learning
- business systems engineering
- construction management administration
- creative industries management
- databases
- entrepreneurship
- finance
- forensics
- human resource management
- organisational psychology
- information systems
 information management/information
- technology managementinternational studies
- law
- management
- marketing
- public health.

Your course

Year 1

In your first semester, you will complete the first four core units:

- Impact of IT
- Industry Insights
- Corporate Systems
- Organisational Databases.

In your second semester, you will

- complete three more core units:Management, People and
 - Organisations
 - Project Management Practice
 - Information Systems Development.

You will also choose your specialisation and complete your first specialisation unit, or start your electives.

Year 2

In first semester, you will complete three core units:

- Business Analysis
- Technology Management
- Creating New Enterprises.

You will also complete your second specialisation unit or electives.

In second semester, you will complete two core units:

- Marketing
- Web Sites for Electronic Commerce.

You will also complete two more specialisation units or electives.

Year 3

In your first semester, you will complete two core units:

- Enterprise Systems Applications
- Information Systems Consulting.

You will also complete two more specialisation units or electives.

In your second semester, you will

complete the last two core units:

- Business Process Modelling
- Corporate Systems Management Project (your final-year showcase project).

You will also complete the last two units of your specialisation or electives.



Handbook

| Year | 2018 |
|-------------------------------------|---|
| QUT code | IT23 |
| CRICOS | 012656E |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 12 |
| Rank | 75 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 288 |
| Start months | July, February |
| Int. Start Months | July, February This course is available to international students who are eligible for a year or more of Advanced Standing (Credit). |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry - ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (English (4,SA) and Maths A, B or C (4,SA)).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Update

As of 2014, this course will only be available for IT23 continuing students and those students who are commencing in 2014 with approved advanced standing of 60cp or more towards core units. New students should refer to <u>IN01 Bachelor of</u> <u>Information Technology</u>.

For further assistance, please contact sef.enquiry@qut.edu.au.

Pathways

You have the opportunity to choose a study pathway:

• professional pathway – you will learn how to think strategically, identify opportunities and solve problems that we don't even know are problems yet. This pathway will enable you to acquire the business and IT skills to have a career as an IT professional within any industry.

• research pathway – if you are interested in shaping the future of the IT industry you can pursue a research career. You will have opportunities to work with researchers on projects and progress on to an honours degree. You will have access to world-leading researchers within the Faculty.

• entrepreneurship pathway – you now have the opportunity to gain the entrepreneurial skills to develop an idea into a commercial opportunity. You will be able to take advantage of the Faculty's close relationship with local technology entrepreneurs to learn from their experiences.

In 2001, the Faculty introduced an accelerated Honours program to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year. The program allowed selected high achieving students the opportunity to undertake one postgraduate unit in the final semester of the Bachelor of Information Technology which would be counted both for completion of the degree and towards Honours. The program also provided students with the opportunity to commence their Honours studies over the Summer Semester.

The Dean's Scholars program was introduced in Semester 1, 2006. This program provides a scholarship for OP 1 and 2 students throughout their Bachelor and Honours degrees. Students in the program are required to maintain a high GPA to continue to qualify for the scholarship each semester. Students in the Dean's Scholars program will be able to take advantage of the Accelerated Honours program. Students in the Dean's Scholars program will have an option to follow an accelerated pathway through the Bachelor of Information Technology, allowing them to complete the Bachelor of Information Technology course plus the Bachelor of Information (Honours) course in a total of three years.

To encourage students to enter the Dean's Scholars program, domestic students have their undergraduate HECS paid by the Faculty and those proceeding to Honour's level will also receive full HECS support. International students who have completed a Year 12 education in Australia and meet the entry requirements for the program will have a third of their tuition fees paid by the Faculty for the undergraduate and Honours program.

An alternative to the Honours program is the Master of Information Technology (Research). Students who complete IT23 with a grade point average equal to, or greater than 5 (7 point scale) and who have decided against enrolling in an Honours program, could undertake this course. In addition, students may wish to enrol in the re-designed postgraduate coursework Masters which has ten specialisations allowing students to either extend their area of interest or specialise



in other areas at the Masters level.

Design Your Own Degree

The Bachelor of Information Technology provides you with the practical skills and theoretical knowledge to become an effective professional.

The 24-unit degree comprises:

• eight core units – four introductory units in first semester to introduce you to the breadth of information technology and its relationship to modern society. Then there are four advanced units spread over the rest of your degree program to develop your professional skills in preparation for your career

• four breadth units (intermediate level units) – these units give you broad technical experience across a range of fields in information technology. They also give you an introduction to choose the specialisation you wish to focus on

• four specialisation units (advanced level units) – these units allow you to focus on your chosen area of study, or you may choose to continue to broaden your information technology skills. This option allows you to study across a selection of study areas rather than focusing on one specialisation

• eight optional units – these units allow you to customise your degree by studying in another professional discipline (for example, business, health, or science). Or you may choose to gain further depth in other areas of information technology.

SPECIALISATION AREAS Business Process Management

Learn how to increase business efficiency. All businesses require IT to effectively and efficiently support their operations. This specialisation provides you with the skills required to improve business performance.

Data Warehousing

Database technology, the software that enables us to buy concert tickets online, download music or book a flight, is sophisticated and complex. You will gain knowledge and skills in the accurate recording, rapid retrieval and management of data that is essential to modern society. You will learn how to mine existing sets of data to extract hidden knowledge.

Digital Environments

Study how developments in IT shape society through applications like FaceBook, MySpace, Second Life, smart phones, iPods and gaming devices.

Enterprise Systems

Enterprise systems from vendors like SAP, Mincom and Oracle form the fundamental structure of organisational processes in most large organisations. You will gain hands-on experience with successful enterprise systems to enable you to put into practice the theory that supports business activities.

Network Systems

Learn to tackle emerging network issues such as security, network monitoring and high availability design, and gain up-todate technical skills for the administration and management of computer networks.

Software Engineering

Software is the invisible infrastructure of modern society. Almost all aspects of business and social endeavour are facilitated by software applications or devices controlled by software. You will learn how leading-edge techniques and technologies enable you to design and implement complex software systems for use in a wide range of domains.

Web Technologies

Web technologies are the principal mechanism for integrating the various applications that exist within an organisation. They also provide the main user interface for most applications used by internal and external clients, including modern web-based interfaces. You will develop practical skills to help organisations use web technologies effectively in deploying a range of applications and services.

Career Outcomes

Information technology is an integral part of all commercial, industrial, government, social and personal activities. In the long term, your career opportunities are unbounded. Some information technology graduates retain a technical focus in roles such as web developer, database manager, network administrator, electronic commerce developer, data communications specialist, software engineer, systems programmer, computer scientist, systems analyst or programmer. Others evolve into domain experts as chief technology officers, chief information officers, managers, executives, business analysts, entrepreneurs or researchers. Graduates have the opportunity to achieve the highest levels of their profession.

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Your Course Year 1

In your first semester you will explore how information technology has changed the world and what the possibilities are for the future. You will look at the details of information, computing and communication technologies to understand how they work. You will take part in hands-on projects developing small information technology systems.

Core units for Year 1:

- Impact of IT
- Emerging Technology
- Industry Insights
- Building IT Systems

In Semester 2 you will undertake three breadth units and one elective.

Year 2

In your second year you will take part in a collaborative team setting, working on small projects that integrate the skills you learnt during Year 1. You will also start studying more advanced units in your chosen field of specialisation.

Core unit for Year 2:

Scalable Systems Development

Throughout Year 2 you will undertake one breadth unit, two specialisation units and four elective units.

Year 3

In third year you will be able to undertake workplace experience opportunities offered by the Faculty, while earning credit towards your degree. You will continue studying in your area of specialisation. In your final semester you will develop a major project, showcasing what you have learnt during your degree—providing you with a key part of your portfolio when seeking a job.

Core units for Year 3:

- Professional Practice in IT
- The Business of IT
- IT Capstone Project

Throughout Year 3 you will undertake two specialisation units and three elective units.

Cooperative Education Program

An optional half or full year period of paid work experience is available to eligible full-time students. Students participating in this program enrol in INS011 Co-Operative Education 1 in the first semester of the program and in INS012 Co-Operative Education 2 in the second semester of the program. The cooperative



Bachelor of Information Technology

education program and its mentoring and assessment requirements make up the required contact and assessment components of both units. Eligibility criteria apply. International students are not eligible due to visa restrictions. International students wishing to undertake a similar program should consider applying to take part in a <u>CEED</u> <u>project</u> or for an <u>ACS Foundation</u> <u>scholarship</u>.

Part-time students who are working in a professional IT position may be able to use their current employment to meet the criteria for completing INB300 Professional Practice in IT, after completion of 168 credit points in the Bachelor of Information Technology. Further information about this option is available from the unit outline for INB300.

Find out more about the <u>Cooperative</u> <u>Education Program.</u>

Domestic Course structure The Bachelor of Information Technology has been redesigned for 2014 to the specifications of the Australian Qualifications Framework and to align with current industry requirements. The changes for 2014 include:

- New course code and award Bachelor of Information Technology (Study Area A)
- Majors : Information Systems and Computer Science
- The new course information will be uploaded to this site shortly.

Design your own degree This information applies to continuing students and those on pathway courses

The Bachelor of Information Technology provides you with the practical skills and theoretical knowledge to become an effective professional. The 24-unit degree comprises:

- eight core units four introductory units in first semester to introduce you to the breadth of information technology and its relationship to modern society. Then there are four advanced units spread over the rest of your degree program to develop your professional skills in preparation for your career
- four breadth units (intermediate level units) - these units give you broad technical experience across a range of fields in information technology. They also give you an

introduction to choose the specialisation you wish to focus on

- four specialisation units (advanced level units) - these units allow you to focus on your chosen area of study, or you may choose to continue to broaden your information technology skills. This option allows you to study across a selection of study areas rather than focusing on one specialisation
- eight optional units these units allow you to customise your degree by studying in another professional discipline (for example, business, health, or science). Or you may choose to gain further depth in other areas of information technology.

Specialisation areas

Business Process Management

Learn how to increase business efficiency. All businesses require IT to effectively and efficiently support their operations. This specialisation provides you with the skills required to improve business performance.

Data Warehousing

Database technology, the software that enables us to buy concert tickets online, download music or book a flight, is sophisticated and complex. You will gain knowledge and skills in the accurate recording, rapid retrieval and management of data that is essential to modern society. You will learn how to search existing sets of data to extract hidden knowledge.

Digital Environments

Study how developments in IT shape society through applications like Facebook, Twitter, Second Life, smart phones, iPods and gaming devices.

Enterprise Systems

Enterprise systems from vendors like SAP, Mincom and Oracle form the fundamental structure of organisational processes in most large organisations. You will gain hands-on experience with successful enterprise systems to enable you to put into practice the theory that supports business activities.

Network Systems

Learn to tackle emerging network issues such as security, network monitoring and high availability design, and gain up-todate technical skills for the administration and management of computer networks.

Software Engineering

Software is the invisible infrastructure of modern society. Almost all aspects of business and social endeavour are facilitated by software applications or devices controlled by software. You will learn leading-edge techniques and technologies to enable you to design and implement complex software systems for use in a wide range of domains.

Web Technologies

Web technologies are the principal mechanism for integrating the various applications that exist within an organisation. They also provide the main user interface for most applications used by internal and external clients, including modern web-based interfaces. You will develop practical skills to help organisations use web technologies effectively in deploying a range of applications and services.

Your course

Year 1

In your first semester you will explore how information technology has changed the world and what the possibilities are for the future. You will look at the details of information, computing and communication technologies to understand how they work. You will take part in hands-on projects developing small information technology systems.

Core units for Semester 1:

- Impact of IT
- Emerging Technology
- Industry Insights
- Building IT Systems.

In Semester 2 you will undertake three breadth units and one optional unit.

Year 2

In your second year you will take part in a collaborative team setting, working on small projects that integrate the skills you learnt during Year 1. You will also start studying more advanced units in your chosen field of specialisation.

Core unit for Year 2:

• Scalable Systems Development.

Throughout Year 2 you will undertake a mix of breadth, specialisation and optional units.

Year 3

In third year you will be able to undertake workplace experience opportunities offered by the Faculty. In your final semester you will develop a major project, which will showcase what you have learnt during your degree and provide you with a key part of your portfolio when seeking a job.

Core units for Year 3:

- Professional Practice in IT
- The Business of IT



Bachelor of Information Technology

• IT Capstone Project.

International Course structure

Design your own degree

The Bachelor of Information Technology provides you with the practical skills and theoretical knowledge to become an effective professional. The 24-unit degree comprises:

- eight core units four introductory units in first semester to introduce you to the breadth of information technology and its relationship to modern society. Then there are four advanced units spread over the rest of your degree program to develop your professional skills in preparation for your career
- four breadth units (intermediate level units) - these units give you broad technical experience across a range of fields in information technology. They also give you an introduction to choose the specialisation you wish to focus on
- four specialisation you main focus of level units) - these units allow you to focus on your chosen area of study, or you may choose to continue to broaden your information technology skills. This option allows you to study across a selection of study areas rather than focusing on one specialisation
- eight optional units these units allow you to customise your degree by studying in another professional discipline (for example, business, health, or science). Or you may choose to gain further depth in other areas of information technology.

Specialisation areas Business Process Management

Learn how to increase business efficiency. All businesses require IT to effectively and efficiently support their operations. This specialisation provides you with the skills required to improve business performance.

Data Warehousing

Database technology, the software that enables us to buy concert tickets online, download music or book a flight, is sophisticated and complex. You will gain knowledge and skills in the accurate recording, rapid retrieval and management of data that is essential to modern society. You will learn how to search existing sets of data to extract hidden knowledge.

Digital Environments

Study how developments in IT shape society through applications like Facebook, Twitter, Second Life, smart phones, iPods and gaming devices.

Enterprise Systems

Enterprise systems from vendors like SAP, Mincom and Oracle form the fundamental structure of organisational processes in most large organisations. You will gain hands-on experience with successful enterprise systems to enable you to put into practice the theory that supports business activities.

Network Systems

Learn to tackle emerging network issues such as security, network monitoring and high availability design, and gain up-todate technical skills for the administration and management of computer networks.

Software Engineering

Software is the invisible infrastructure of modern society. Almost all aspects of business and social endeavour are facilitated by software applications or devices controlled by software. You will learn leading-edge techniques and technologies to enable you to design and implement complex software systems for use in a wide range of domains.

Web Technologies

Web technologies are the principal mechanism for integrating the various applications that exist within an organisation. They also provide the main user interface for most applications used by internal and external clients, including modern web-based interfaces. You will develop practical skills to help organisations use web technologies effectively in deploying a range of applications and services.

Your course

Year 1

In your first semester you will explore how information technology has changed the world and what the possibilities are for the future. You will look at the details of information, computing and communication technologies to understand how they work. You will take part in hands-on projects developing small information technology systems.

Core units for Semester 1:

- Impact of IT
- Emerging Technology
- Industry Insights
- Building IT Systems.

In Semester 2 you will undertake three breadth units and one optional unit.

Year 2

In your second year you will take part in a collaborative team setting, working on small projects that integrate the skills you learnt during Year 1. You will also start

studying more advanced units in your chosen field of specialisation.

Core unit for Year 2:

Scalable Systems Development.

Throughout Year 2 you will undertake a mix of breadth, specialisation and optional units.

Year 3

In third year you will be able to undertake workplace experience opportunities offered by the Faculty. In your final semester you will develop a major project, which will showcase what you have learnt during your degree and provide you with a key part of your portfolio when seeking a job.

Core units for Year 3:

- Professional Practice in IT
- The Business of IT
- IT Capstone Project.

Sample Structure Course Updates

This stucture is for students who are admitted to IT23 commencing 2014 or for those students who have not yet completed their 1st year Core units.

From 2014, first year core units in IT23 Bachelor of Information Technology have been recoded, renamed or discontinued. To see how these changes affect you, please consult the Information Technology unit replacement table below in conjunction with the course structure. Affected Study Plans are being amended to reflect the changes.

Please contact the Faculty if you have any concerns.

Information Technology Unit Replacement Table

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2

| Code | Title |
|--------------------|-------------------------------------|
| Year 1, Semester 1 | |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |



Bachelor of Information Technology

[Note: INB101 - INB104 have been replaced with new units IFB101-104 from Semester 1 2014 onwards] Year 1, Semester 2 IT Breadth Option Unit IT Breadth Option Unit IT Breadth Option Unit **Complementary Studies Unit** Year 2, Semester 1 IT Project Design and IFB299 Development [INB201 replaced by IFB299 in 2015.] [NOTE: INB201/IFB299 can only be taken after you have completed a minimum of 36 credit points of breadth units.] IT Breadth Option Unit IT Specialisation Option Unit **Complementary Studies Unit** Year 2, Semester 2 IT Specialisation Option Unit **Complementary Studies Unit Complementary Studies Unit Complementary Studies Unit** Year 3, Semester 1 IFB398 Capstone Project (Phase 1) CAB398 replaced INB300 in 2016. IFB398 then replaced CAB398 in 2017. If INB302 had been completed, INB300 was replaced with an option line. **Business of Information** IAB202 Technology [INB301 replaced by IAB202 in 2016.] [NOTE: INB300/CAB398/IFB398 and INB301/IAB202 can only be taken after you have completed a minimum of 168 credit points of study.] IT Specialisation Option Unit **Complementary Studies Unit** Year 3, Semester 2 IFB399 Capstone Project (Phase 2) If INB300 was replaced by CAB398/IFB398 on study plan in 2016, then INB302 was also replaced by CAB399/IFB399. Otherwise INB302 replaced with an option line in 2017. IT Specialisation Option Unit **Complementary Studies Unit**

Complementary Studies Unit



Bachelor of Mathematics

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | MS01 |
| CRICOS | 049433D |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 7 |
| Rank | 86 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,800 per year full-time (96 credit points) |
| Total credit points | 288 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Associate Professor Tim Moroney; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: Maths C.

International Subject prerequisites • Maths B

Matho B

Recommended Study: Maths C

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|---|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Course Overview

The Bachelor of Mathematics course provides a modern and rigorous training in mathematics to prepare students both for graduate careers in industry and government as well as for honours and postgraduate research work. This course provides students with a mathematics degree that clearly defines paths of study associated with different graduate outcomes in order to meet the wide range of employment possibilities open to mathematics graduates. As well as this, it maintains for students the option to complete a degree that is heavily mathematical through the inclusion of second major and minor options in mathematics and statistics.

The course combines underlying theory with modelling, computational skills and the latest computer technology to enable students to solve real-world problems and prepare them for their future career. Skill development in communication, problem solving, critical thinking and teamwork form an integral part of this course.

Course Design

Your QUT Bachelor of Mathematics degree consists of 288 credit points (24 units) arranged as follows:

(a) 72 credit points (6 units) of Core units, which are further divided into 48 credit points (4 units) of Mathematics Core units, and 24 credit points (2 units) of Core Option units selected from an approved list.

(b) 120 credit points (10 units) of Major Core units, comprising from a choice of one (1) Major in either:

- Applied and Computational Mathematics;
- •
- Decision Science; or
- Statistical Science.

(c)

96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Professional Recognition Professional recognition can be found in the individual majors of the Bachelor of Mathematics (MS01).

Pathways to Further Study

The QUT Bachelor of Mathematics is located at Level 7 of the Australian Qualifications Framework (AQF). Eligible graduates may continue their studies in this discipline with an additional honours year in (MS10) Bachelor of Mathematics (Honours).

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | MS01 |
| CRICOS | 049433D |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 7 |
| Rank | 86 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,800 per year full-time (96 credit points) |
| Total credit points | 288 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Associate Professor Tim Moroney; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | TBA +61 7 3138 8822 sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: Maths C.

International Subject prerequisites • Maths B

Recommended Study: Maths C

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|---|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Overview

The Applied and Computational Mathematics major provides high quality learning for students who want to combine their studies in mathematics with considerable involvement in real-world applications and computational simulations. The major introduces you to a wide range of concepts in mathematical foundations, modelling and computational methods, and provides strong links between theory and application. You will investigate underlying mathematical theory to see how it can be applied to real-world scenarios from many fields of study including the physical and chemical sciences, biology, engineering and the social sciences. You will also develop computational solution and simulation methods to couple with modelling skills in order to investigate large-scale applied problems.

Course Design

Your QUT Bachelor of Mathematics degree consists of 288 credit points (24 units) arranged as follows: (a) 72 credit points (6 units) of Core units, which are further divided into 48 credit points (4 units) of Mathematics Core units, and 24 credit points (2 units) of Core Option units selected from an approved list.

(b) 120 credit points (10 units) of Major Core units

(c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Mathematics Core Units

These units give you the grounding in mathematical theory and practice upon which your major units will build, and also provide an introductory taste of each of the three majors: applied and computational mathematics; decision science; and statistical science.

Core Option Units List

You may choose from a wide variety of introductory units from other disciplines offered at QUT, or you may choose additional mathematics units. The additional mathematics units include a unit specially designed to assist students without a background of successful study in Mathematics C at high school; an alternative unit aimed at high achieving students that explores some interesting and unusual aspects of mathematics in some detail; and a unit introducing the field of computational and simulation science which combines mathematics, science and computing to simulate realworld problems.

Major Units

Your major is your area of specialisation, in which you will acquire in-depth knowledge and expertise, preparing you for your entry into the workforce or for further study. All majors share the same introductory and advanced units in algebra and calculus, meaning you do not need to decide on your major upfront.

Complementary Studies

Applied and Computational Mathematics Major students may elect to undertake a Second Major (8 unit set) or two Minors (4 unit set each)

Second Major:

A choice of one second major from:

- Decision Science
- Statistical Science
- •
- Computational and Simulation Science



Bachelor of Mathematics (Applied and Computational Mathematics)

- Accountancy
- Applied Economics and Finance
- Logistics Management
- **Biological Sciences** •
- Chemistry
- Earth Science
- **Environmental Science**
- · Physics

Minors:

A choice of two minors from:

- Decision Science
- Statistical Science
- **Discrete Mathematics** •
- Computational and Simulation . Science
- **Biological Sciences** •
- ٠
- Chemistry
- Earth Science •
- **Environmental Science**
- Physics
- International exchange
- University Wide Minors

Career Outcomes

As a graduate of the Bachelor of Mathematics (Applied and Computational Mathematics) you will find employment opportunities across a wide range of areas, such as finance, investment, information technology, environmental management, health, marketing, logistics, defence, medicine, education and research. In addition to your knowledge and abilities in mathematics, you will also

be highly valued for your analytical and problem-solving skills.

Professional Recognition

Graduates are eligible for membership in the Australian Mathematical Society (AMS), and ANZIAM.

Domestic Course structure

Your QUT Bachelor of Mathematics degree consists of 288 credit points (24 units) arranged as follows:

- 72 credit points (6 units) of core units, which are further divided into 48 credit points (4 units) of mathematics core units, and 24 credit points (2 units) of core option units selected from an approved list
- 120 credit points (10 units) of major units
- 96 credit points of complementary studies comprising of either a second major (8 unit set) or two minors (4 unit set each)

Mathematics core units

These units give you the grounding in mathematical theory and practice upon which your major units will build, and also provide an introductory taste of each of the three majors: applied and computational mathematics; decision science; and statistical science.

Core option units

You may choose from a wide variety of introductory units from other disciplines offered at QUT, or you may choose additional mathematics units. The additional mathematics units include a unit specially designed to assist students without a background of successful study in Mathematics C at high school; an alternative unit aimed at high achieving students that explores some interesting and unusual aspects of mathematics in some detail; and a unit introducing the field of computational and simulation science which combines mathematics, science and computing to simulate realworld problems.

Major units

Your major is your area of specialisation, in which you will acquire in-depth knowledge and expertise, preparing you for your entry into the workforce or for further study. All majors share the same introductory and advanced units in algebra and calculus, meaning you do not need to decide on your major until your second year of study.

Second major or minors

You may choose to undertake a second major: an eight-unit set in which you will acquire a significant depth of knowledge and expertise in an area to complement your major. You may choose a second major in decision science, statistical science, computational and simulation science, accountancy, applied economics and finance, physics, chemistry, biological science, earth science or environmental science.

Alternatively you may choose to undertake two minors: four-unit sets with intermediate to advanced level content which extend or supplement studies in your major. Minors are available from a range of inter- and intra-faculty disciplines, as well as experiential minors such as international exchange.

International Course structure

Course Design

Your QUT Bachelor of Mathematics degree consists of 288 credit points (24 units) arranged as follows:

- 72 credit points (6 units) of Core units, which are further divided into 48 credit points (4 units) of Mathematics Core units, and 24 credit points (2 units) of Core Option units selected from an approved list.
- 120 credit points (10 units) of Major units.
- 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Mathematics Core Units

These units give you the grounding in mathematical theory and practice upon which your major units will build, and also provide an introductory taste of each of the three majors: applied and computational mathematics; decision science; and statistical science.

Core Option Units

You may choose from a wide variety of introductory units from other disciplines offered at QUT, or you may choose additional mathematics units. The additional mathematics units include a unit specially designed to assist students without a background of successful study in Mathematics C at high school; an alternative unit aimed at high achieving students that explores some interesting and unusual aspects of mathematics in some detail; and a unit introducing the field of computational and simulation science which combines mathematics, science and computing to simulate realworld problems.

Major Units

Your major is your area of specialisation, in which you will acquire in-depth



Bachelor of Mathematics (Applied and Computational Mathematics)

knowledge and expertise, preparing you for your entry into the workforce or for further study. All majors share the same introductory and advanced units in algebra and calculus, meaning you do not need to decide on your major until your second year of study.

Second Major or Minors

You may choose to undertake a second major: an 8 unit set in which you will acquire a significant depth of knowledge and expertise in an area to complement your major. You may choose a second major in applied and computational mathematics, decision science, statistical science, computational and simulation science, accountancy, applied economics and finance, physics, chemistry, biological science, earth science or environmental science.

Alternatively you may choose to undertake two minors: 4 unit sets with intermediate to advanced level content which extend or supplement studies in your major. Minors are available from a range of inter- and intra-faculty disciplines, as well as experiential minors such as international exchange.

Sample Structure Semesters

| ٠ | Year | 1, | Semester | 1 |
|---|------|----|----------|---|
| | | | | |

- Year 1, Semester 2
- Year 2, Semester 1

| • Year 2, Semester 2 • Year 3, Semester 1 • Year 3, Semester 2 • NOTE: | |
|---|--|
| Code | Title |
| Year 1, Semeste | er 1 |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB102 | Abstract Mathematical Reasoning |
| MXB103 | Introductory Computational Mathematics |
| Core Unit Option | 1* |
| Year 1, Semeste | er 2 |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB107 | Introduction to Statistical Modelling |
| Core Unit Option* | |
| Year 2, Semester 1 | |
| MXB201 | Advanced Linear Algebra |

MXB221

| | Equations | |
|---|-----------------------------------|--|
| 2nd Major/Minor unit | | |
| 2nd Major/Minor | unit | |
| Year 2, Semeste | er 2 | |
| MXB202 | Advanced Calculus | |
| MXB222 | Computational Linear Algebra | |
| 2nd Major/Minor | unit | |
| 2nd Major/Minor | unit | |
| Year 3, Semeste | er 1 | |
| MXB321 | Applied Transport Theory | |
| MXB322 | Partial Differential Equations | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor | unit | |
| Year 3, Semeste | er 2 | |
| MXB323 | Dynamical Systems | |
| MXB324 | Computational Fluid Dynamics | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| NOTE: | | |
| *Core Unit Options may be taken in any semester - depending on choice of Options/ 2nd Major/ Minors | | |

Study Area Description

For more details and description on this minor please refer to the **Complementary Studies** for your course at the Faculty's <u>Student Zone</u> under "Your Course" page.

| | Init | 1 10 |
|-----|------|------|
| I U | חוונ | LIS |

| Code | Title |
|-------------------|--|
| Select 48cp from: | |
| BVB101 | Foundations of Biology |
| BVB102 | Evolution |
| BVB201 | Biological Processes |
| BVB202 | Experimental Design and Quantitative Methods |
| BVB203 | Plant Biology |
| BVB204 | Ecology |
| BVB301 | Animal Biology |
| BVB305 | Microbiology and the Environment |
| BVB313 | Population Genetics and Molecular Ecology |

Ordinary Differential

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | MS01 |
| CRICOS | 049433D |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 7 |
| Rank | 86 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,800 per year full-time (96 credit points) |
| Total credit points | 288 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Associate Professor Tim Moroney; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Associate Professor Paul Corry +61 7 3138 8822 sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: Maths C.

International Subject prerequisites • Maths B

Recommended Study: Maths C

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Overview

Decision science is a mathematical discipline that considers how to make appropriate and better decisions in complex decision-making problems. It deals with how best to design, operate and/or predict behaviour of complex systems like people, machinery, materials and money in industry, business, finance, education, government and defence. The Decision Science major encompasses the study of quantitative techniques relevant to decision-making in its broadest sense. You will employ a problem-solving approach, using advanced analytical methods such as operations research, financial mathematics, stochastic and mathematical modelling, and mathematical optimisation. Along the way you will also use a variety of software and improve your information technology skills. Because of its emphasis on humantechnology interaction and its focus on practical applications, Decision Science overlaps with other disciplines, notably industrial engineering and operations management, economics and finance. This is a multi-disciplinary field.

The coursework also introduces you to different industries and processes that greatly contribute to the economy and environment of nations around the world. These include manufacturing and production, management, health care, finance and economics, goods and services, infrastructure, transportation and logistics, mining, defence, etc. This study area provides a foundation for a variety of careers, and further study.

There is a strong emphasis on:

Sample Structure

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- <u>NOTE:</u>

| Code | Title | |
|----------------------|--|--|
| Year 1, Semeste | er 1 | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| MXB102 | Abstract Mathematical Reasoning | |
| MXB103 | Introductory Computational Mathematics | |
| Core Unit Option | * | |
| Year 1, Semeste | er 2 | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| MXB107 | Introduction to Statistical Modelling | |
| Core Unit Option | * | |
| Year 2, Semeste | er 1 | |
| MXB201 | Advanced Linear Algebra | |
| MXB232 | Introduction to Operations Research | |
| 2nd Major/Minor | unit | |
| 2nd Major/Minor unit | | |
| Year 2, Semeste | er 2 | |
| MXB202 | Advanced Calculus | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| CAB201 | Programming Principles | |
| or | | |
| MXB241 | Probability and Stochastic Modelling 2 | |

| Year 3, Semester 1 | | |
|----------------------|--|--|
| MXB332 | Optimisation Modelling | |
| MXB341 | Statistical Inference | |
| MXB351 | Coding Theory and Graph Theory | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 2 | | |
| MXB334 | Operations Research for Stochastic Processes | |
| MXB335 | Advanced Optimisation | |

Modelling 2nd Major/Minor unit

2nd Major/Minor unit

NOTE:

MXB335

*Core Unit Options may be taken in any semester - depending on choice of Options/ 2nd Major/ Minors

Study Area Description

For more details and description on this minor please refer to the Complementary Studies for your course at the Faculty's Student Zone under "Your Course" page.

| Unit List | |
|------------------|--|
| Code | Title |
| Select 48cp from | : |
| BVB101 | Foundations of Biology |
| BVB102 | Evolution |
| BVB201 | Biological Processes |
| BVB202 | Experimental Design and Quantitative Methods |
| BVB203 | Plant Biology |
| BVB204 | Ecology |
| BVB301 | Animal Biology |
| BVB305 | Microbiology and the Environment |
| BVB313 | Population Genetics and Molecular Ecology |

Handbook

| Year | 2018 |
|-------------------------------------|--|
| | |
| QUT code | MS01 |
| CRICOS | 049433D |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 7 |
| Rank | 86 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,800 per year full-time (96 credit points) |
| Total credit points | 288 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Associate Professor Tim Moroney; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Associate Professor Chris Drovandi +61 7 3138 8822 sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: Maths C.

International Subject prerequisites • Maths B

Recommended Study: Maths C

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Overview

The Statistical Science major will provide you with the methodology for analysing data using empirical, theoretical and computational tools. You will discover complex statistical techniques and concepts through applications and datasets from the real world, providing strong links between theory and application. Many of our academics are world leaders in research and have strong industry ties that ensure the relevance of teaching material and high-quality learning experiences. The major will provide you with a fundamental and thorough understanding of statistics and statistical methodology, and the ability to apply such quantitative skills in real-world scenarios. Thus we aim to prepare you for a career in industry, government and/or research.

Course Design

Your QUT Bachelor of Mathematics degree consists of 288 credit points (24 units) arranged as follows:

(a) 72 credit points (6 units) of Core units,

which are further divided into 48 credit points (4 units) of Mathematics Core units, and 24 credit points (2 units) of Core Option units selected from an approved list.

(b) 120 credit points (10 units) of Major Core units

(c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Mathematics Core Units

These units give you the grounding in mathematical theory and practice upon which your major units will build, and also provide an introductory taste of each of the three majors: applied and computational mathematics; decision science; and statistical science.

Core Option Units List

You may choose from a wide variety of introductory units from other disciplines offered at QUT, or you may choose additional mathematics units. The additional mathematics units include a unit specially designed to assist students without a background of successful study in Mathematics C at high school; an alternative unit aimed at high achieving students that explores some interesting and unusual aspects of mathematics in some detail; and a unit introducing the field of computational and simulation science which combines mathematics, science and computing to simulate realworld problems.

Major Units

Your major is your area of specialisation, in which you will acquire in-depth knowledge and expertise, preparing you for your entry into the workforce or for further study. All majors share the same introductory and advanced units in algebra and calculus, meaning you do not need to decide on your major upfront.

Complementary Studies

Statistical Science Major students may elect to undertake a Second Major (8 unit set) or two Minors (4 unit set each)

Second Major:

A choice of one second major from:

- Applied and Computational Mathematics
- •
- Decision Science
- Accountancy
- Applied Economics and Finance

- Logistics Management
- Biological Sciences
- Chemistry
- Earth Science .
- **Environmental Science**
- Physics

Minors:

A choice of two minors from:

- · Applied and Computational **Mathematics**
- **Decision Science**
- **Discrete Mathematics** .
- Computational and Simulation . Science
- **Biological Sciences**
- Chemistry ٠
- Earth Science •
- **Environmental Science**
- Physics •
- International exchange
- University Wide Minors

Career Outcomes

Career outcomes for graduates of the **Bachelor of Mathematics (Statistical** Science) include data analyst, quantitative analyst, researcher, risk analyst, and statistician. Positions of this nature are often found with employers such as the Australian Bureau of Statistics, Queensland Treasury, state and Commonwealth governments, financial institutions, CSIRO, insurance companies, medical companies.

Professional Recognition

Graduates are eligible for membership in the Statistical Society of Australia

Domestic Course structure

Your QUT Bachelor of Mathematics degree consists of 288 credit points (24 units) arranged as follows:

- 72 credit points (6 units) of core units, which are further divided into 48 credit points (4 units) of mathematics core units, and 24 credit points (2 units) of core option units selected from an approved list • 120 credit points (10 units) of major
- units
- 96 credit points of complementary studies comprising of either a second major (8 unit set) or two minors (4 unit set each)

Mathematics core units

These units give you the grounding in mathematical theory and practice upon which your major units will build, and also provide an introductory taste of each of the three majors: applied and computational mathematics; decision science; and statistical science.

Core option units

You may choose from a wide variety of introductory units from other disciplines offered at QUT, or you may choose additional mathematics units. The additional mathematics units include a unit specially designed to assist students without a background of successful study in Mathematics C at high school; an alternative unit aimed at high achieving students that explores some interesting and unusual aspects of mathematics in some detail; and a unit introducing the field of computational and simulation science which combines mathematics, science and computing to simulate realworld problems.

Major units

Your major is your area of specialisation, in which you will acquire in-depth knowledge and expertise, preparing you for your entry into the workforce or for further study. All majors share the same introductory and advanced units in algebra and calculus, meaning you do not need to decide on your major until your second year of study.

Second major or minors

You may choose to undertake a second major: an eight-unit set in which you will acquire a significant depth of knowledge and expertise in an area to complement your major. You may choose a second major in applied and computational mathematics, decision

science, computational and simulation science, accountancy, applied economics and finance, physics, chemistry, biological science, earth science or environmental science.

Alternatively you may choose to undertake two minors: four-unit sets with intermediate to advanced level content which extend or supplement studies in your major. Minors are available from a range of inter- and intra-faculty disciplines, as well as experiential minors such as international exchange.

International Course structure

Course Design

Your QUT Bachelor of Mathematics degree consists of 288 credit points (24 units) arranged as follows:

- 72 credit points (6 units) of Core units, which are further divided into 48 credit points (4 units) of Mathematics Core units, and 24 credit points (2 units) of Core Option units selected from an approved list.
- 120 credit points (10 units) of Major units.
- 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Mathematics Core Units

These units give you the grounding in mathematical theory and practice upon which your major units will build, and also provide an introductory taste of each of the three majors: applied and computational mathematics; decision science: and statistical science.

Core Option Units

You may choose from a wide variety of introductory units from other disciplines offered at QUT, or you may choose additional mathematics units. The additional mathematics units include a unit specially designed to assist students without a background of successful study in Mathematics C at high school; an alternative unit aimed at high achieving students that explores some interesting and unusual aspects of mathematics in some detail; and a unit introducing the field of computational and simulation science which combines mathematics, science and computing to simulate realworld problems.

Major Units

Your major is your area of specialisation, in which you will acquire in-depth knowledge and expertise, preparing you for your entry into the workforce or for further study. All majors share the same



Bachelor of Mathematics (Statistical Science)

introductory and advanced units in algebra and calculus, meaning you do not need to decide on your major until your second year of study.

Second Major or Minors

You may choose to undertake a second major: an 8 unit set in which you will acquire a significant depth of knowledge and expertise in an area to complement your major. You may choose a second major in applied and computational mathematics, decision science, statistical science, computational and simulation science, accountancy, applied economics and finance, physics, chemistry, biological science, earth science or environmental science.

Alternatively you may choose to undertake two minors: 4 unit sets with intermediate to advanced level content which extend or supplement studies in your major. Minors are available from a range of inter- and intra-faculty disciplines, as well as experiential minors such as international exchange.

Sample Structure **Semesters**

- Year 1, Semester 1
- Year 1, Semester 2 Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- NOTE:

| Code | Title | |
|----------------------|--|--|
| Year 1, Semeste | er 1 | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| MXB102 | Abstract Mathematical Reasoning | |
| MXB103 | Introductory Computational Mathematics | |
| Core Unit Option* | | |
| Year 1, Semester 2 | | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| MXB107 | Introduction to Statistical Modelling | |
| Core Unit Option* | | |
| Year 2, Semester 1 | | |
| MXB201 | Advanced Linear Algebra | |
| MXB242 | Regression and Design | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |

Year 2, Semester 2 **MXB202 Advanced Calculus** Probability and **MXB241** Stochastic Modelling 2 2nd Major/Minor unit 2nd Major/Minor unit Year 3, Semester 1 **MXB341** Statistical Inference **MXB342** Statistical Techniques 2nd Major/Minor unit 2nd Major/Minor unit Year 3, Semester 2 Modelling Dependent **MXB343** Data **Generalised Linear MXB344** Models 2nd Major/Minor unit

2nd Major/Minor unit NOTE: *Core Unit Options may be taken in any semester - depending on choice of

Study Area Description

Options/ 2nd Major/ Minors

For more details and description on this minor please refer to the Complementary Studies for your course

at the Faculty's Student Zone under "Your Course" page.

| Unit List | |
|-------------------|--|
| Code | Title |
| Select 48cp from: | |
| BVB101 | Foundations of Biology |
| BVB102 | Evolution |
| BVB201 | Biological Processes |
| BVB202 | Experimental Design and Quantitative Methods |
| BVB203 | Plant Biology |
| BVB204 | Ecology |
| BVB301 | Animal Biology |
| BVB305 | Microbiology and the Environment |
| BVB313 | Population Genetics and Molecular Ecology |

Bachelor of Applied Science

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | SC01 |
| CRICOS | 003502J |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| Rank | 72 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February This course has been replaced by ST01 Bachelor of Science. However if you are offered a second or third year place you will be admitted to this course instead as only the first year of ST01 Bachelor of Science will be offered in 2013. |
| Int. Start Months | July, February Conditions apply for July entry. |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Marion Bateson; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (English (4, SA) and Maths B (4, SA)). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science or Maths C.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies (English (4, SA) and Maths B (4, SA)).

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

IMPORTANT NOTICE

This course is only available for continuing students in Bachelor of Applied Science and for 2013 commencing students meeting 96cp Science Advanced Standing 1st year units. New students should refer to <u>ST01 Bachelor of Science</u>. Please contact <u>sef.enquiry@qut.edu.au</u> for any enquiries.

Forensic Science: Is currently under review. Students wishing to select and enrol into the Forensic Science major will need to discuss this first with the Course Coordinator <u>Dr Marion Bateson</u>.

Design your own degree

You have a broad range of options to choose from and the flexibility to create your own personal science degree program. If you are not sure of your career direction, don't worry because this decision can be delayed until after you have sampled a range of science disciplines during your first year of study. The 24 unit degree comprises:

First-year program (eight units)

The first year is designed to give you experience in a wide range of basic science disciplines, consisting of three general foundation units, one maths unit, and four major foundation units. Some of these foundation sciences, such as mathematics and chemistry, will underpin all of your later studies. All of the first-year studies are designed to challenge and engage you in the wonders of science, regardless of your prior exposure to science studies. You should seek advice from our expert staff of your choice of major to suit your interests and capabilities, and your personal and career aspirations.

Major (eight units)

Choose your main specialisation study area (your major) from the list below. This will form the basis for your qualification, for example Bachelor of Applied Science (Biotechnology). As QUT courses are designed in close consultation with industry you will be eligible for the relevant professional accreditation when you graduate. The major areas available are:

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | SC01 |
| CRICOS | 003502J |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| Rank | 72 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February This course has been replaced by ST01 Bachelor of Science. However if you are offered a second or third year place you will be admitted to this course instead as only the first year of ST01 Bachelor of Science will be offered in 2013. |
| Int. Start Months | July, February Conditions apply for July entry |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Marion Bateson; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Associate Professor Eric Waclawik +61 7 3138 2579 (Alternate phone: +61 7 3138 8822) e.waclawik@qut.edu.au (Alternate email: sef.enquiry@qut.edu.au) |

Domestic Entry requirements Advanced standing entry only

This course has been replaced by <u>ST01</u> <u>Bachelor of Science</u>. However if you are offered a second or third year place you will be admitted to this course instead as only the first year of ST01 Bachelor of Science will be offered in 2013.

Deferment

Whilst deferment available it is mostly likely deferred students will commence <u>ST01 Bachelor of Science</u> in 2014.

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (English (4, SA) and Maths B (4, SA)). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science or Maths C.

International Entry requirements Recommended Study At least one of the sciences.

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies (English (4, SA) and Maths B (4, SA)).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

IMPORTANT NOTICE

As of 2013, this course will only be available for continuing Bachelor of Applied Science students and those students who are commencing in 2013 with advanced standing of 96 credit points of 1st year units.

New students - please refer to <u>ST01</u> <u>Bachelor of Science</u>. Please contact sef.enquiry@qut.edu.au for any enquiries.

Career Outcomes

Among a diverse range of employment opportunities, you may become an industrial chemist, materials scientist, environmental chemist, quality control analyst, laboratory supervisor, food chemistry, or an organic/inorganic chemist. Your interactions with QUT experts in current fields of interest including drug development, clay and minerals chemistry, renewable energy sources, nanotechnology, environmental monitoring, and applications of modern analytical instrumentation may lead to careers in these areas.

QUT graduates are sought after by police and other forensics laboratories because of their extensive practical training using modern analytical instrumentation.

With the addition of a postgraduate diploma in education, you may wish to pursue opportunities in the teaching profession.

Professional Recognition

Graduates completing the chemistry major with the chemistry for industry second major or forensic science major are eligible for membership of the Royal Australian Chemical Insitute (RACI).

Domestic Course structure Year 1

You will undertake introductory core studies in a range of scientific areas including life sciences, chemistry, physics, mathematics and environmental science to give you a solid foundation for your future studies. If you are taking the chemistry for industry second major you will be provided with opportunities to develop further laboratory skills. If you are taking chemistry with forensic science, you will also cover introductory life science topics that prepare you for important tasks like DNA profiling.

Year 2

You will begin more specialised study of the core chemistry sub-disciplines of analytical inorganic, organic and physical

Bachelor of Applied Science (Chemistry)

chemistry. In the chemistry for industry second major you will begin extensive studies in analytical chemistry, chemical and nanotechnologies. Problem solving and the development of critical thinking will be emphasised. You should expect plenty of practical work and hands-on experience. The communication skills, generic scientific skills, and report preparation tools you will learn at QUT will be vital to your future employment.

Year 3

You will tackle more challenging advanced concepts in the core subdisciplines of chemical science. In this second major, you will have the advantage of field trips to major industrial sites. All third year chemistry studies will undertake a one-semester research project under the guidance of experienced staff. Students will be trained in start-of-the-art techniques and will have the opportunity to pursue a field of interest to them. Whether you are seeking your first job or contemplating higher research degree studies, you will have access to advice from gualified professionals.

<u>top</u>

International Course structure Year 1

You will undertake introductory core studies in a range of scientific areas including life sciences, chemistry, physics, mathematics and environmental science to give you a solid foundation for your future studies. If you are taking the chemistry for industry second major you will be provided with opportunities to develop further laboratory skills. If you are taking chemistry with forensic science, you will also cover introductory life science topics that prepare you for important tasks like DNA profiling.

Year 2

You will begin more specialised study of the core chemistry sub-disciplines of analytical inorganic, organic and physical chemistry. In the chemistry for industry second major you will begin extensive studies in analytical chemistry, chemical and nanotechnologies. Problem solving and the development of critical thinking will be emphasised. You should expect plenty of practical work and hands-on experience. The communication skills, generic scientific skills, and report preparation tools you will learn at QUT will be vital to your future employment.

Year 3

You will tackle more challenging advanced concepts in the core subdisciplines of chemical science. In this second major, you will have the advantage of field trips to major industrial sites. All third year chemistry studies will undertake a one-semester research project under the guidance of experienced staff. Students will be trained in start-of-the-art techniques and will have the opportunity to pursue a field of interest to them. Whether you are seeking your first job or contemplating higher research degree studies, you will have access to advice from qualified professionals.

<u>top</u>

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | SC01 |
| CRICOS | 003502J |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| Rank | 72 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February This course has been replaced by ST01 Bachelor of Science. However if you are offered a second or third year place you will be admitted to this course instead as only the first year of ST01 Bachelor of Science will be offered in 2013. |
| Int. Start Months | July, February Conditions apply for July entry |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Marion Bateson; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Craig Sloss +61 7 3138 2610 (Alternate phone: +61 7 3138 8822) c.sloss@qut.edu.au (Alternate email: sef.enquiry@qut.edu.au) |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (English (4, SA) and Maths B (4, SA)). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science or Maths C.

International Entry requirements Recommended Study At least one of the sciences.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies (English (4, SA) and Maths B (4, SA)).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

IMPORTANT NOTICE

As of 2013, this course will only be available for continuing Bachelor of Applied Science students and those students who are commencing in 2013 with advanced standing of 96 credit points of 1st year units.

New students - please refer to <u>ST01</u> <u>Bachelor of Science</u>. Please contact sef.enquiry@qut.edu.au for any enquiries.

Career Outcomes

Employment opportunities exist within a variety of government organisations and consulting companies with work ranging from field geologists to research scientists. Exploration geologists are

employed by mining and hydrocarbon exploration companies where they may be involved in underground geological mapping, evaluation of ore reserves, production control, or exploration for new mineral or oil and gas deposits. They may be based in remote settings or major cities. Graduates may work in computing, data modelling and remote sensing in any of these areas.

An honours degree has traditionally been required by many employers including the larger mining and exploration companies.

Professional Recognition

Graduates are eligible for membership of the Australasian Institute of Mining and Metallurgy (AusIMM), Australian Institute of Geoscientists (AIG), and the Geological Society of Australia (GSA).

Domestic Course structure

Year 1

You will undertake introductory core studies in a range of scientific areas including life sciences, chemistry, physics, mathematics and environmental science to give you a solid foundation for your future studies. You will also select specific units that will help you decide whether to pursue career paths in exploration or environmental geoscience. Following these introductory studies you should be in a position to confirm your choice of major area of study.

Year 2

You will learn fundamental concepts and gain practical experience in identifying and analysing earth materials, both in the laboratory and in the field. At the same time, you will be introduced to the geological processes that govern the evolution of the earth's surface (sedimentary environments). You will then be introduced to rocks and processes that occur deeper within the earth (igneous and metamorphic realms) and longer term geological processes including structural deformation and stratigraphic evolution. The year culminates with you being able to solve real-world geological problems based on data you collect in the field.

Year 3

You will receive more advanced training in the fundamental areas of petrology and geochemistry with the addition of exploration geophysics and specialised units relevant to the mining, coal, petroleum and/or hydrogeologyenvironmental industries. You will be introduced to techniques and case studies that will prepare you for a wide variety of career paths. At the same time, you will learn new skills in subsurface analysis and mapping, remote sensing, and spatial analysis, including computerbased geographical information systems.

International Course structure

Year 1

You will undertake introductory core studies in a range of scientific areas including life sciences, chemistry, physics, mathematics and environmental science to give you a solid foundation for your future studies. You will also select specific units that will help you decide whether to pursue career paths in exploration or environmental geoscience. Following these introductory studies you should be in a position to confirm your choice of major area of study.

Year 2

You will learn fundamental concepts and gain practical experience in identifying and analysing earth materials, both in the laboratory and in the field. At the same time, you will be introduced to the geological processes that govern the evolution of the earth's surface (sedimentary environments). You will then be introduced to rocks and processes that occur deeper within the earth (igneous and metamorphic realms) and longer term geological processes including structural deformation and stratigraphic evolution. The year culminates with you being able to solve real-world geological problems based on data you collect in the field.

Year 3

You will receive more advanced training in the fundamental areas of petrology and geochemistry with the addition of exploration geophysics and specialised units relevant to the mining, coal, petroleum and/or hydrogeologyenvironmental industries. You will be introduced to techniques and case studies that will prepare you for a wide variety of career paths. At the same time, you will learn new skills in subsurface analysis and mapping, remote sensing, and spatial analysis, including computerbased geographical information systems.



Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | SC01 |
| CRICOS | 003502J |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| Rank | 72 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February This course has been replaced by ST01 Bachelor of Science. However if you are offered a second or third year place you will be admitted to this course instead as only the first year of ST01 Bachelor of Science will be offered in 2013. |
| Int. Start Months | July, February Conditions apply for July entry |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Marion Bateson; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Stephen Hughes +61 7 3138 2327 (Alternate phone: +61 7 3138 8822) sw.hughes@qut.edu.au (Alternate email: sef.enquiry@qut.edu.au) |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (English (4, SA) and Maths B (4, SA)). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science or Maths C.

International Entry requirements Recommended Study Maths C

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies (English (4, SA) and Maths B (4, SA)).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

IMPORTANT NOTICE

As of 2013, this course will only be available for continuing Bachelor of Applied Science students and those students who are commencing in 2013 with advanced standing of 96 credit points of 1st year units.

New students - please refer to <u>ST01</u> <u>Bachelor of Science</u>. Please contact sef.enquiry@qut.edu.au for any enquiries.

Career Outcomes

Physicists are an asset to almost any industry. Employment areas of QUT physics graduates are very wide-ranging. These include research and development departments of large manufacturing companies, mining and exploration companies, research institutions such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO) and the Defence Science and Technology Organisation (DSTO), government bodies such as the Bureau of Meteorology, Environmental Protection Agencies and health departments, schools, universities and hospitals. Broad training in data analysis and problemsolving skills also make physicists well suited to management and consulting roles in a range of technology-based industries.

Professional Recognition

Graduates are eligible for membership of the Australian Institute of Physics (AIP).

Domestic Course structure Year 1

You will be introduced to a broad range of physics topics including mechanics, electricity, optics, waves,

electromagnetism and atomic physics. Mathematics units will provide you with the skills and background knowledge required to support more advanced study in second and third years. You may choose to undertake a foundation unit in one of the other scientific disciplines to broaden your knowledge. You also have the flexibility to select two elective units to add another dimension to your science knowledge.

Year 2

You will begin to study specialist areas of physics at advanced level. Topics include electronics, instrumentation, radiation physics, thermodynamics and solid-state physics. Study of a secondary area of specialisation (second major) also begins. Second majors offered to physics students include astrophysics, mathematics, geoscience, games technology and music.

Year 3

You will proceed to further specialist areas including quantum physics, condensed matter physics, statistical mechanics and advanced electromagnetism. Your studies in experimental physics will help you develop data collection and data processing skills, and allow you to experience the methods used and to acquire the skills required to undertake research.

International Course structure

Year 1

You will be introduced to a broad range of physics topics including mechanics, electricity, optics, waves, electromagnetism and atomic physics.

Mathematics units will provide you with the skills and background knowledge required to support more advanced study in second and third years. You may choose to undertake a foundation unit in one of the other scientific disciplines to broaden your knowledge. You also have the flexibility to select two elective units to add another dimension to your science knowledge.

Year 2

You will begin to study specialist areas of physics at advanced level. Topics include electronics, instrumentation, radiation physics, thermodynamics and solid-state physics. Study of a secondary area of specialisation (second major) also begins. Second majors offered to physics students include astrophysics, mathematics, geoscience, games technology and music.

Year 3

You will proceed to further specialist areas including quantum physics, condensed matter physics, statistical mechanics and advanced electromagnetism. Your studies in experimental physics will help you develop data collection and data processing skills, and allow you to experience the methods used and to acquire the skills required to undertake research.



Bachelor of Science

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | ST01 |
| CRICOS | 077696D |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 13 |
| Rank | 71 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,400 per year full-time (96 credit points) |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Graham Johnson; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Rules

1. To fulfil the requirements for the award of the Bachelor of Science degree, you must complete a total of at least 288 credit points, comprising at least 192 credit points of science units. The units completed for the award of the degree must include:

(a) the first year program as outlined in the course summary

(b) a major study

(c) a second major study or two minor areas of study

Major and second major studies are defined in terms of the discipline area and the academic level at which the units are offered.

Major

A major must be completed in one of the

following discipline areas: biological sciences; chemistry; earth science; environmental science; physics. A major comprises 120 credit points of units at advanced level, including at least 48 credit points at the third level.

Second Major

A second major may be completed by selecting appropriate units from another major, or from the following additional discipline areas: Human Biomolecular Science, Innovation and Entrepreneurship, Policy & Governance, Sustainable Environments for Health, Computational Science,

Minors and Extension Minors

Science Communication.

Minors and Extension Minors are offered in the following disciplines:

Analytical Chemistry, Astrophysics, Cell and Molecular Biology, Human Health and Disease, Industrial Chemistry, Sustainable Environments for Health, Wildlife Biology, Marine Science, Plant Biotechnology, Genetics and Genomics, Forensic Science, Applied Ecology.

Non-Science: corporate IT systems, environmental engineering studies, ethics and human rights, foreign languages, games technology, management, marketing, music, nutrition, psychology etc.

Note: A second major comprises 96 credit points with at least 60 credit points at advanced level for the Science second majors and at least 48 credit points for the non-Science second majors. Major and second major studies may be taken in closely related discipline areas.

2. Optional (elective) units may be chosen from (a) ST01 majors/second majors other than those undertaken by a student, (b) other appropriate units offered by the Science and Engineering Faculty, and (c) units offered by other faculties.

3. Students are normally expected to complete the course in minimum time. A full-time student normally enrols in an average of 48 credit points per semester for six semesters and a part-time student normally enrols in 24 credit points per semester for 12 semesters. (A full-time student is one who is enrolled in 36 or more credit points per semester, whereas a part-time student is one who is enrolled in less than 36 credit points per semester.)

Notes on the Rules

1. For offerings in the Science and Engineering Faculty, the term advanced level refers to units in Schedules 2 and 3. For units offered outside the Science and Engineering Faculty, the term advanced level refers to units for which there is at least one prerequisite unit.

2. Level 2 and level 3 units are listed in Schedules 2 and 3 respectively according to their unit codes. For each unit, the major(s) and/or second major(s) in which the unit is offered are shown. It should be noted that not every advanced level unit offered in each major/second major is mandatory.

3. The major undertaken by a student will qualify the generic award title of BSc and will appear in the award title in parentheses. The general form of the award will therefore be: BSc(Major).

Domestic Course structure Your science degree

At QUT you'll create your own personal science degree program of 24 units. During your first year of study you'll get to sample a range of core science disciplines, allowing you to decide on your major later.

Faculty core units

These five units give you an introduction to the principles of science the opportunity to learn by enquiry, and to broaden your understanding of the core sciences. You'll study four Faculty core units and an Optional unit of your choice.

From your very first semester, you will collaborate with your peers and teaching staff in QUT's exciting new learning environments. You will explore real-world problems from multiple scientific perspectives and learn the tools of the trade. Depending on your choices, you may find yourself out in the field, working in the laboratory or learning about the impact of scientific discovery on people, policy, industry and the planet.

Working with data you have collected, you'll study how to apply fundamental methods of scientific practice, perform scientific analysis, and learn the tools to present your findings. You'll have the opportunity to explore and discover the range of career and professional outcomes available to you, so you can gain the most from your unit selection and the flexibility the Bachelor of Science has to offer.

Primary major

Your major is your main area of study for what you aspire to become professionally. You will receive in-depth knowledge and expertise within your chosen scientific discipline, preparing you for entry into the workforce or further study.

It comprises 11 units and there are five majors to choose from:

- biological sciences
- chemistry
- earth sciences
- environmental sciences
- physics.

Complementary study areas

This is where you make the degree your own, tailoring your studies to further match your individual career goals with a wide range of complementary study options available. You'll have the opportunity to develop sought-after professional skills, deepen your understanding of your major discipline, pursue an interest from across the university, or broaden your scientific understanding. You can even work with industry or study overseas to gain credit towards your degree.

You can choose: a Second major (eight units); or an Extended minor (four units) or Breadth minor (four units), plus either a Faculty minor (four units) or Breadth minor (four units).

Second major (eight units)

Choose a second area of study to complement your major, and develop a significant depth of knowledge and skills in two discipline areas. Experience another field, learn another academic methodology and experience interdisciplinary networking.

Choose a second Science discipline, or explore different perspectives which might include:

- computational science
- innovation
- science communication, or
- policy and governance.

Minor (four units)

You might prefer to expand the breadth and depth of your studies by adding to your chosen science major two minors.

Sample Structure Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2

| Code | Title | |
|---------------------------------------|---------------------------------|--|
| Year 1, Sem | ester 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| SEB115 | Experimental Science | |
| SEB116 | Experimental Science 2 | |
| Year 1, Sem | ester 2 | |
| Major Unit | | |
| Major Unit | | |
| Core Unit Op | otion | |
| | e (for Biology, Earth | |
| | vironmental Science) or | |
| - | emistry and Physics) | |
| Year 2, Sem | ester 1 | |
| Major Unit | | |
| Major Unit 2nd major or minor unit | | |
| | | |
| 2nd major or | | |
| Year 2, Sem | ester 2 | |
| Major Unit | | |
| Major Unit | an in an unit | |
| 2nd major or | | |
| 2nd major or | | |
| Year 2, Semester 1 | | |
| Major Unit | | |
| Major Unit | | |
| 2nd major or minor unit | | |
| 2nd major or minor unit | | |
| Year 2, Semester 2 | | |
| Major Unit | | |
| Major Unit | | |
| | 2nd major or minor unit | |
| Zng major or | THINOT UNIT | |

2nd major or minor unit

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | ST01 |
| CRICOS | 077696D |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 13 |
| Rank | 71 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,400 per year full-time (96 credit points) |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Graham Johnson; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Marion Bateson |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

International Subject prerequisites

- Agricultural Science, Biology, Chemistry, Earth Science, Marine Science, Marine Studies, Physics or Science21
- Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|---|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Overview

Biology is the study of life and living things: animals, insects, plants, and microorganisms; everything that breathes, grows and feeds us; creatures that fly through the air majestically and those that lurk in the depths of the ocean, under rocks, or even under the toilet seat.

Biologists are curious about all these things and want to know how they work, how to grow and protect them—how to get involved with life on this planet.

Biologists also love a challenge. How will we feed a population of eight billion people in 2025? Can we use biological waste to solve our energy crisis? How can we protect our plants and animals from new and fiendish exotic diseases? And how many rare species can we save from extinction?

Why choose this course?

This course will provide a strong foundation in the core biological sciences such as physiology, genetics, zoology, plant sciences and microbiology. It has been designed to be hands on, to develop problem solving skills through active learning, and to give an early appreciation of the way that many disciplines can be brought to bear on a single problem.

As well as receiving core training in the basics through the biology major, students can either add breadth to their degree by choosing a minor from a complementary discipline (e.g. chemistry), or depth to their biological skills through a specialised minor such as biotechnology.

During the course you will experience some of the most advanced laboratories in Australia and be taught by staff who are at the top of their research fields internationally. You can also expect to stay in touch with the real world, as guest lectures, site visits and opportunities for work-integrated learning bring a strong industry flavour to the degree.

Career outcomes

Biology graduates work in a wide range of jobs throughout the public and private sectors, and in a range of environments including offices, laboratories, farms, fields, factories cities and forests.

Laboratory-based careers may include laboratory management, basic research, forensic microbiology, or molecular genetics. Farm and field-based work could entail animal management, plant breeding, entomology, marine biology, or pest and disease management. Industrial work might involve biotechnology to produce food, fuel or pharmaceuticals. Other careers could involve science writing, teaching, policy development, or the commercialisation and the management of biological products and processes.

Professional recognition

Professional recognition can be achieved through membership of an appropriate scientific society, such as the Australian Society for Biochemistry and Molecular Biology, the Ecological Society of Australia, the Australian Society of Horticultural Science and many more.

Domestic Course structure

During your first year of study you'll get to sample a range of core science disciplines, allowing you to decide on your major later.

Faculty core units

These five units give you an introduction to the principles of science. The inquiry based experimental science units will give you the opportunity to learn by enquiry and become familiar with the methods of scientific inquiry.

From your very first semester, you will collaborate with your peers and teaching staff in QUT's exciting new learning environments. You will explore real-world problems from multiple scientific perspectives and learn the tools of the trade. Depending on your choices, you may find yourself out in the field, working in the laboratory or learning about the impact of scientific discovery on people, policy, industry and the planet.

Working with data you have collected, you'll study how to apply fundamental methods of scientific practice, perform scientific analysis, and learn the tools to present your findings. You'll have the opportunity to explore and discover the range of career and professional outcomes available to you, so you can gain the most from your unit selection and the flexibility the Bachelor of Science has to offer.

Primary major

Your major is your main area of study for what you aspire to become professionally. You will receive in-depth knowledge and expertise within your chosen scientific discipline, preparing you for entry into the workforce or further study. Your primary major comprises of 11 units.

Complementary study areas

This is where you make the degree your own, tailoring your studies to further match your individual career goals with a wide range of complementary study options available. You'll have the opportunity to develop sought-after professional skills, deepen your understanding of your major discipline, pursue an interest from across the university, or broaden your scientific understanding. You can even work with industry or study overseas to gain credit towards your degree.

You can choose: a second major (eight units); or two minors (four units each).

Second major (eight units) Choose a second area of study to complement your major, and develop a significant depth of knowledge and skills in two discipline areas. Experience another field, learn another academic methodology and experience interdisciplinary networking.

Choose a second science discipline (chemistry, earth science, environmental science or physics), or explore different perspectives which might include:

- computational and simulation science
- innovation and entrepreneurship
- science communication, or
- policy and governance.

Minor (four units)

You might prefer to expand the breadth and depth of your studies by adding to your chosen science major two minors.

Sample Structure Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- <u>Biological Sciences Major Unit</u>
 <u>Options</u>

| Code | Title | | |
|--------------------------|--|--|--|
| Year 1, Semester | Year 1, Semester 1 | | |
| SEB104 | Grand Challenges in Science | | |
| SEB113 | Quantitative Methods in Science | | |
| SEB115 | Experimental Science | | |
| SEB116 | Experimental Science 2 | | |
| Year 1, Semester 2 | | | |
| BVB101 | Foundations of Biology | | |
| BVB102 | Evolution | | |
| Core Unit Option | | | |
| Biological Scienc | es Major Unit Option | | |
| Year 2, Semester | r 1 | | |
| BVB301 | Animal Biology | | |
| BVB202 | Experimental Design and Quantitative Methods | | |
| 2nd major or minor unit | | | |
| 2nd major or minor unit | | | |
| Year 2, Semester 2 | | | |
| BVB201 | Biological Processes | | |
| BVB204 | Ecology | | |
| 2nd major or minor unit | | | |

| Year 3, Semeste | Year 3, Semester 1 | | |
|---|---|--|--|
| BVB203 | Plant Biology | | |
| BVB203 will be offered in semester 1 from 2019 with a prerequisite of BVB201. | | | |
| BVB305 | Microbiology and the Environment | | |
| 2nd major or min | or unit | | |
| 2nd major or min | or unit | | |
| Year 3, Semeste | r 2 | | |
| BVB304 | Integrative Biology | | |
| BVB313 | Population Genetics and Molecular Ecology | | |
| 2nd major or min | 2nd major or minor unit | | |
| 2nd major or min | or unit | | |
| Biological Scienc | es Major Unit Options | | |
| CVB101 | General Chemistry | | |
| CVB102 | Chemical Structure and Reactivity | | |
| ERB101 | Earth Systems | | |
| ERB102 | Evolving Earth | | |
| EVB102 | Ecosystems and the Environment | | |
| MXB100 | Introductory Calculus and Algebra | | |
| PVB101 | Physics of the Very Large | | |
| PVB102 | Physics of the Very Small | | |



Bachelor of Science (Chemistry)

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | ST01 |
| CRICOS | 077696D |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 13 |
| Rank | 71 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,400 per year full-time (96 credit points) |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Graham Johnson; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr James Blinco |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Overview

Chemists are involved in most areas of science, technology, environment and industry; for example, medicinal drugs, nanotechnology, water and air quality and energy production. Manufacturing industries rely on chemists to ensure that quality and safety standards are maintained. The development of better and safer drugs depends heavily on the input of chemists.

Chemistry is the study of structures, properties, synthesis and reactions of molecules and materials and these principles are fundamental to many other disciplines, including biotechnology, environmental science, geosciences, materials science and food science.

At QUT you will study analytical, physical, organic and inorganic chemistry with an

additional focus on modern applications such as nanotechnology, analytical chemistry, and spectroscopy.

Why choose this course?

The QUT chemistry degree is a qualification that is known and respected by employers. Many employers prefer QUT chemistry graduates, especially those with an extension minor in chemistry, because of their advanced technical skills, their experience with modern instrumentation and their training in scientific communication.

After two years' study, you will be eligible to apply for the Queensland Health Analytical Chemistry Scholarship (available only to QUT chemistry students), which pays \$21 000 for your third year, with guaranteed employment for two years after graduation#.

Our training in analytical chemistry throughout the chemistry degree is renowned nationally. You will undertake a comprehensive laboratory program including experiments using modern computer-based analytical instruments and gain vital knowledge and experience in the health and safety aspects of handling chemicals. You will learn under the guidance of highly respected lecturers, most of whom are actively involved in cutting-edge research.

Career outcomes

Among a diverse range of employment opportunities, you may become an industrial chemist, materials scientist, environmental chemist, quality control analyst, laboratory supervisor, food chemist, or an organic/inorganic chemist. Your interaction with QUT experts in current fields of interest, including drug development, clay and minerals chemistry, renewable energy sources, nanotechnology, environmental monitoring, and applications of modern analytical instrumentation, may lead to careers in these areas.

QUT graduates are sought after by police and other forensics laboratories because of their extensive practical training using modern analytical instrumentation. With the addition of a postgraduate diploma in education, you may wish to pursue opportunities in the teaching profession.

Professional recognition

Graduates completing the chemistry major with the chemistry for industry second major are eligible for membership

Bachelor of Science (Chemistry)

of the Royal Australian Chemical Institute.

Domestic Course structure

During your first year of study you'll get to sample a range of core science disciplines, allowing you to decide on your major later.

Faculty core units

These five units give you an introduction to the principles of science. The inquiry based experimental science units will give you the opportunity to learn by enquiry and become familiar with the methods of scientific inquiry.

From your very first semester, you will collaborate with your peers and teaching staff in QUT's exciting new learning environments. You will explore real-world problems from multiple scientific perspectives and learn the tools of the trade. Depending on your choices, you may find yourself out in the field, working in the laboratory or learning about the impact of scientific discovery on people, policy, industry and the planet.

Working with data you have collected, you'll study how to apply fundamental methods of scientific practice, perform scientific analysis, and learn the tools to present your findings. You'll have the opportunity to explore and discover the range of career and professional outcomes available to you, so you can gain the most from your unit selection and the flexibility the Bachelor of Science has to offer.

Primary major

Your major is your main area of study for what you aspire to become professionally. You will receive in-depth knowledge and expertise within your chosen scientific discipline, preparing you for entry into the workforce or further study. Your primary major comprises 11 units. From 2018 MXB100 Introductory Calculus and Algebra will also be part of your major.

Complementary study areas

This is where you make the degree your own, tailoring your studies to further match your individual career goals with a wide range of complementary study options available. You'll have the opportunity to develop sought-after professional skills, deepen your understanding of your major discipline, pursue an interest from across the university, or broaden your scientific understanding. You can even work with industry or study overseas to gain credit towards your degree.

You can choose: a second major (eight

units); or a minor (four units).

Second major (eight units)

Choose a second area of study to complement your major, and develop a significant depth of knowledge and skills in two discipline areas. Experience another field, learn another academic methodology and experience interdisciplinary networking.

Choose a second science discipline (biological sciences, chemistry, environmental science or physics), or explore different perspectives which might include:

- computational and simulation science
- innovation and entrepreneurship
- science communication, or
- policy and governance.

Minor (four units)

You might prefer to expand the breadth and depth of your studies by adding to your chosen science major with two minors.

Sample Structure

- Voor 1. Somooto
- Year 1, Semester 1
 Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 1
- Year 3, Semester 1
- Year 3, Semester 2
- Code Title Year 1, Semester 1 Grand Challenges in **SEB104** Science **Quantitative Methods SEB113** in Science **Experimental Science SEB115** 1 **Experimental Science SEB116** 2 Year 1, Semester 2 **CVB101 General Chemistry Chemical Structure** CVB102 and Reactivity Introductory Calculus **MXB100** and Algebra Core Unit Option Year 2, Semester 1 CVB201 Inorganic Chemistry CVB202 Analytical Chemistry 2nd major or minor unit 2nd major or minor unit Year 2, Semester 2 **CVB203 Physical Chemistry** Organic Structure and **CVB204**

Mechanisms

2nd major or minor unit

| 2nd major or minor unit | | |
|-------------------------|---|--|
| Year 3, Semester 1 | | |
| CVB301 | Organic Chemistry: Strategies for Synthesis | |
| CVB302 | Applied Physical Chemistry | |
| 2nd major or minor unit | | |
| 2nd major or minor unit | | |
| Year 3, Semester 2 | | |
| CVB303 | Coordination Chemistry | |
| CVB304 | Chemistry Research Project | |
| 2nd major or minor unit | | |
| | | |

2nd major or minor unit

Study Area Description

For more details and description on this minor please refer to the

Complementary Studies for your course at the Faculty's <u>Student Zone</u> under "Your Course" page.

| Unit List | |
|------------------|--|
| Code | Title |
| Select 48cp from | : |
| BVB101 | Foundations of Biology |
| BVB102 | Evolution |
| BVB201 | Biological Processes |
| BVB202 | Experimental Design and Quantitative Methods |
| BVB203 | Plant Biology |
| BVB204 | Ecology |
| BVB301 | Animal Biology |
| BVB305 | Microbiology and the Environment |
| BVB313 | Population Genetics and Molecular Ecology |



Bachelor of Science (Earth Science)

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | ST01 |
| CRICOS | 077696D |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 13 |
| Rank | 71 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,400 per year full-time (96 credit points) |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Graham Johnson; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Luke Nothdurft |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Overview

The Earth is an amazing place and for an earth scientist, it offers a unique natural laboratory that covers both space and time. Earth science is a multidisciplinary science that applies the tools of chemistry, physics, biology and mathematics to understand earth processes, decipher its past and predict its future. Earth scientists work to monitor changes in the Earth's environment and suggest solutions to environmental problems. They study natural hazards to find ways to lessen the loss of life and reduce property damage.

Earth scientists play key roles in the search for fuels and minerals. Climate change, earthquakes, and geothermal energy are just a few of the issues that require knowledge of earth science. Earth science (also known as geoscience) blends the traditional fields of geology, physical geography and oceanography/ hydrology. Geology describes the rocky parts of the Earth's crust (or lithosphere) and its historic development. Physical geography, which studies the Earth's surface, includes geomorphology, soil science, and biogeoscience. The marine and freshwater parts of Earth define the fields of oceanography and hydrology.

Why choose this course?

Earth science is an exciting and fun science with many interesting and practical applications and a great number of travelling opportunities. If you enjoy working outdoors and are interested in understanding how the world works, then you will find earth science a rewarding area of study. Blending current research issues and problem solving with theory and industry-related, hands-on practicals, the earth science major provides you with a fundamental background to pursue a career in either the resource or the environmental sector.

Career outcomes

There is currently a shortage of earth scientists in Australia and employment rates are high and salaries great. Earth scientists are in high demand in the energy sector (oil, gas, coal, geothermal) and exploration and mining industries. Many earth scientists find employment in environmental consulting companies tackling geotechnical, groundwater contamination, natural hazards or climate change issues. Earth scientists may work for government agencies such as CSIRO and Geoscience Australia doing applied research, or for state or local governments.

Domestic Course structure

During your first year of study you'll get to sample a range of core science disciplines, allowing you to decide on your major later.

Faculty core units

These five units give you an introduction to the principles of science. The inquiry based experimental science units will give you the opportunity to learn by enquiry and become familiar with the methods of scientific inquiry.

From your very first semester, you will collaborate with your peers and teaching staff in QUT's exciting new learning environments. You will explore real-world problems from multiple scientific

Bachelor of Science (Earth Science)

perspectives and learn the tools of the trade. Depending on your choices, you may find yourself out in the field, working in the laboratory or learning about the impact of scientific discovery on people, policy, industry and the planet.

Working with data you have collected, you'll study how to apply fundamental methods of scientific practice, perform scientific analysis, and learn the tools to present your findings. You'll have the opportunity to explore and discover the range of career and professional outcomes available to you, so you can gain the most from your unit selection and the flexibility the Bachelor of Science has to offer.

Your major

Your major is your main area of study for what you aspire to become professionally. You will receive in-depth knowledge and expertise within your chosen scientific discipline, preparing you for entry into the workforce or further study. Your primary major comprises 11 units.

Complementary study areas

This is where you make the degree your own, tailoring your studies to further match your individual career goals with a wide range of complementary study options available. You'll have the opportunity to develop sought-after professional skills, deepen your understanding of your major discipline, pursue an interest from across the university, or broaden your scientific understanding. You can even work with industry or study overseas to gain credit towards your degree.

You can choose: a second major (eight units); or a minor.

Second major (eight units)

Choose a second area of study to complement your major, and develop a significant depth of knowledge and skills in two discipline areas. Experience another field, learn another academic methodology and experience interdisciplinary networking.

Choose a second science discipline (biological sciences, chemistry, environmental science or physics), or explore different perspectives which might include:

- computational and simulation science
- innovation and entrepreneurship
- science communication, or
- policy and governance.

Minor (four units)

You might prefer to expand the breadth and depth of your studies by adding to your chosen science major with two minors.

Sample Structure Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
 Year 3, Semester 2
- Earth Science Major Unit Options

| Code | Title | |
|---------------------------------|---|--|
| Year 1, Semeste | er 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 1, Semester 2 | | |
| ERB101 | Earth Systems | |
| ERB102 | Evolving Earth | |
| Core Unit Option | | |
| Earth Science Major Unit Option | | |
| Year 2, Semester 1 | | |
| ERB201 | Destructive Earth: Natural Hazards | |
| ERB202 | Marine Geoscience | |
| 2nd major or mi | nor unit | |
| 2nd major or mi | nor unit | |
| Year 2, Semester 2 | | |
| ERB203 | Sedimentary Geology and Stratigraphy | |
| ERB204 | Deforming Earth: Fundamentals of Structural Geology | |
| 2nd major or mi | nor unit | |
| 2nd major or mi | nor unit | |
| Year 3, Semest | er 1 | |
| ERB301 | Chemical Earth | |
| ERB302 | Applied Geophysics | |
| 2nd major or minor unit | | |
| 2nd major or minor unit | | |
| Year 3, Semester 2 | | |
| ERB303 | Energy Resources and Basin Analysis | |
| ERB304 | Dynamic Earth: Plate Tectonics | |
| 2nd major or minor unit | | |
| 2nd major or minor unit | | |
| Earth Science M | lajor Unit Options | |
| BVB101 | Foundations of Biology | |
| BVB102 | Evolution | |

| CVB101 | General Chemistry |
|--------|-----------------------------------|
| CVB102 | Chemical Structure and Reactivity |
| EVB102 | Ecosystems and the Environment |
| MXB100 | Introductory Calculus and Algebra |
| PVB101 | Physics of the Very Large |
| PVB102 | Physics of the Very Small |

Study Area Description

For more details and description on this minor please refer to the **Complementary Studies** for your course at the Faculty's <u>Student Zone</u> under "Your Course" page.

| Unit List | | |
|-------------------|--|--|
| Code | Title | |
| Select 48cp from: | | |
| BVB101 | Foundations of Biology | |
| BVB102 | Evolution | |
| BVB201 | Biological Processes | |
| BVB202 | Experimental Design and Quantitative Methods | |
| BVB203 | Plant Biology | |
| BVB204 | Ecology | |
| BVB301 | Animal Biology | |
| BVB305 | Microbiology and the Environment | |
| BVB313 | Population Genetics and Molecular Ecology | |



Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | ST01 |
| CRICOS | 077696D |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 13 |
| Rank | 71 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,400 per year full-time (96 credit points) |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Graham Johnson; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Andrew Baker |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Why choose this course?

The environmental science course at QUT is designed to provide hands-on skills and field experiences using realworld industry examples and methods to allow you to pursue a variety of careers as an environmental scientist. The program has particular strengths in the areas of land resources, hydrogeology, environmental geology, biogeochemistry, geographic information systems and field mapping, systems modelling and sustainable management.

The program also emphasises practical skills and experience, including day-long and extended field trips. You will learn from guest lecturers from relevant government agencies, industry and QUT staff who regularly provide advice for industry, government and community groups.

Overview

We rely on our natural environment to sustain our lives and our lifestyles. Do you want to help the earth's natural environment to maintain its integrity while continuing our urban and rural development? Have you wanted to be part of the solution to our increasing environmental issues such as climate change, air, water and soil quality, soil erosion, dry land salinity or water resources? We continually need to improve our understanding and management of the natural environment to balance our development with wise management while minimising impacts and degradation.

An understanding of the mechanisms controlling environmental systems provides the skills required to undertake a great range of scientific environmental planning and management, and tackle problems such as local water quality and ecosystem impacts, soil erosion, catchment and groundwater use, or adaptation to global climate change.

Career outcomes

Environmental scientists are continually needed in a wide variety of planning, management, monitoring and research careers. These roles are usually found in government departments and agencies, local councils, consultancy, and industrial and mining companies. As an environmental science graduate, you could be working in urban, rural or remote settings depending on your interests.

Graduates are equipped to assess resources, implement environmental impact programs, analyse and interpret environmental data and formulate contingency plans in a wide variety of areas. These include strategic land use planning; waste disposal; pollution measurement and control; coastal protection; environmental impact of mining, tourism and urban development; rehabilitation and reforestation of degraded sites; ground water assessment and modelling; flood plain planning; erosion control; and marine science.

Professional recognition

Graduates are eligible for membership of the Environment Institute of Australia and New Zealand and a variety of other scientific societies, including the Soil Science Society of Australia and the Ecological Society of Australia.



Domestic Course structure

During your first year of study you'll get to sample a range of core science disciplines, allowing you to decide on your major later.

Faculty core units

These five units give you an introduction to the principles of science. The inquiry based experimental science units will give you the opportunity to learn by enquiry and become familiar with the methods of scientific inquiry.

From your very first semester, you will collaborate with your peers and teaching staff in QUT's exciting new learning environments. You will explore real-world problems from multiple scientific perspectives and learn the tools of the trade. Depending on your choices, you may find yourself out in the field, working in the laboratory or learning about the impact of scientific discovery on people, policy, industry and the planet.

Working with data you have collected, you'll study how to apply fundamental methods of scientific practice, perform scientific analysis, and learn the tools to present your findings. You'll have the opportunity to explore and discover the range of career and professional outcomes available to you, so you can gain the most from your unit selection and the flexibility the Bachelor of Science has to offer.

Primary major

Your major is your main area of study for what you aspire to become professionally. You will receive in-depth knowledge and expertise within your chosen scientific discipline, preparing you for entry into the workforce or further study. Your primary major comprises of of 11 units.

Complementary study areas

This is where you make the degree your own, tailoring your studies to further match your individual career goals with a wide range of complementary study options available. You'll have the opportunity to develop sought-after professional skills, deepen your understanding of your major discipline, pursue an interest from across the university, or broaden your scientific understanding. You can even work with industry or study overseas to gain credit towards your degree.

You can choose: a second major (eight units); or two minors (four units each).

Second major (eight units)

Choose a second area of study to complement your major, and develop a significant depth of knowledge and skills in two discipline areas. Experience another field, learn another academic methodology and experience interdisciplinary networking.

Choose a second science discipline (chemistry, earth science, environmental science or physics), or explore different perspectives which might include:

- computational and simulation science
- innovation and entrepreneurship
- science communication, or
 policy and governance. Minor (four units)You might prefer to expand the breadth and depth of your studies by adding to your chosen science major two minors.

Sample Structure Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
 Year 3, Semester 1
- Year 3, Semester 1
- Environmental Science Major Unit Options

| Code | Title | |
|----------------------------|--|--|
| Year 1, Semeste | r 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| SEB115 | Experimental Science | |
| SEB116 | Experimental Science 2 | |
| Year 1, Semester | r 2 | |
| ERB101 | Earth Systems | |
| EVB102 | Ecosystems and the Environment | |
| Core Unit Option | | |
| Environmental So Option | cience Major Unit | |
| Year 2, Semester | r 1 | |
| BVB202 | Experimental Design and Quantitative Methods | |
| EVB203 | Geospatial Information Science | |
| 2nd major or minor unit | | |
| 2nd major or minor unit | | |
| Year 2, Semester 2 | | |
| BVB204 | Ecology | |

| EVB302 | Environmental Pollution | |
|-----------------------------|---|--|
| 2nd major or min | or unit | |
| 2nd major or min | or unit | |
| Year 3, Semeste | r 1 | |
| BVB311 | Conservation Biology | |
| EVB312 | Soils and the Environment | |
| 2nd major or min | or unit | |
| 2nd major or minor unit | | |
| Year 3, Semester 2 | | |
| ERB310 | Groundwater Systems | |
| EVB304 | Case Studies in Environmental Science | |
| 2nd major or min | or unit | |
| 2nd major or min | or unit | |
| Environmental So Options | cience Major Unit | |
| BVB101 | Foundations of Biology | |
| BVB102 | Evolution | |
| CVB101 | General Chemistry | |
| CVB102 | Chemical Structure and Reactivity | |
| ERB102 | Evolving Earth | |
| MXB100 | Introductory Calculus and Algebra | |
| PVB101 | Physics of the Very Large | |
| PVB102 | Physics of the Very Small | |

Study Area Description

For more details and description on this minor please refer to the **Complementary Studies** for your course at the Faculty's <u>Student Zone</u> under "Your Course" page.

| Unit List | |
|------------------|--|
| Code | Title |
| Select 48cp from | : |
| BVB101 | Foundations of Biology |
| BVB102 | Evolution |
| BVB201 | Biological Processes |
| BVB202 | Experimental Design and Quantitative Methods |
| BVB203 | Plant Biology |
| BVB204 | Ecology |
| BVB301 | Animal Biology |
| BVB305 | Microbiology and the Environment |
| BVB313 | Population Genetics and Molecular Ecology |



Bachelor of Science (Physics)

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | ST01 |
| CRICOS | 077696D |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| OP | 13 |
| Rank | 71 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,400 per year full-time (96 credit points) |
| Total credit points | 288 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Graham Johnson; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Professor Nunzio Motta |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Overview

Physicists are involved in finding solutions to many current and future challenges facing our world. These include developing instruments for environmental monitoring, computer models for climate change prediction, and developing solar and renewable energy systems . Physicists are also attempting to address the world's ever-increasing appetite for information and information processing by undertaking research into quantum computers, nanotechnology, lasers and photonics.

Physics deals with the natural laws and processes, and the states and properties, of matter, energy, space and time. Physics also underlies many of the recent advances in information technology, medicine and biotechnology. Areas of specialisation include mechanics, electromagnetism, lasers and optics, medical physics, computational physics, nuclear and radiation physics, astronomy and astrophysics, thermodynamics, quantum mechanics and relativity.

Why choose this course?

QUT's physics course has a strong applied emphasis so you will spend a significant amount of time in the undergraduate teaching laboratories. In each unit that you study the theory will be supported by experimental work. In your final year, you will undertake research and gain exposure to the research laboratories through the experimental physics unit.

You can also apply for a Vacation Research Experience Scholarship to gain experience working on a research project. Many of the lecturers at QUT have worked in industry and QUT works closely with industry through consultancy and research projects, so you can be sure that the course will be up to date and relevant to the real world.

Career outcomes

Physicists are an asset to almost any industry. Employment areas of QUT physics graduates are very wide ranging. These include research and development departments of large manufacturing companies, mining and exploration companies, research institutions such as the Commonwealth Scientific and Industrial Research Organisation and the Defence Science and Technology Organisation, government bodies such as the Bureau of Meteorology, environmental protection agencies and health departments, schools, universities and hospitals.

Broad training in data analysis and problem-solving skills also makes physicists well suited to management and consulting roles in a range of technology based industries.

Professional recognition

Graduates are eligible for membership of the Australian Institute of Physics, dependent on choice of study options.

Domestic Course structure

During your first year of study you'll get to sample a range of core science disciplines, allowing you to decide on your major later.

Bachelor of Science (Physics)

Faculty core units

These five units give you an introduction to the principles of science. The inquiry based experimental science units will give you the opportunity to learn by enquiry and become familiar with the methods of scientific inquiry.

From your very first semester, you will collaborate with your peers and teaching staff in QUT's exciting new learning environments. You will explore real-world problems from multiple scientific perspectives and learn the tools of the trade. Depending on your choices, you may find yourself out in the field, working in the laboratory or learning about the impact of scientific discovery on people, policy, industry and the planet.

Working with data you have collected, you'll study how to apply fundamental methods of scientific practice, perform scientific analysis, and learn the tools to present your findings. You'll have the opportunity to explore and discover the range of career and professional outcomes available to you, so you can gain the most from your unit selection and the flexibility the Bachelor of Science has to offer.

Primary major

Your major is your main area of study for what you aspire to become professionally. You will receive in-depth knowledge and expertise within your chosen scientific discipline, preparing you for entry into the workforce or further study. Your primary major comprises 11 units.

Complementary study areas

This is where you make the degree your own, tailoring your studies to further match your individual career goals with a wide range of complementary study options available. You'll have the opportunity to develop sought-after professional skills, deepen your understanding of your major discipline, pursue an interest from across the university, or broaden your scientific understanding. You can even work with industry or study overseas to gain credit towards your degree.

You can choose: a second major (eight units); or a minor (four units).

Second major (eight units)

Choose a second area of study to complement your major, and develop a significant depth of knowledge and skills in two discipline areas. Experience another field, learn another academic methodology and experience interdisciplinary networking. Choose a second science discipline (biological sciences, chemistry, environmental science or physics), or explore different perspectives which might include:

- computational and simulation science
- innovation and entrepreneurship
- science communication, or
- policy and governance.

Minor (four units)

You might prefer to expand the breadth and depth of your studies by adding to your chosen science major with two minors. Minors include:

Astrophysics

Nanotechnology

Sample Structure Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
 Year 3, Semester 1
- Year 3, Semester 1
- Code
 Title

 Year 1, Semester 1
 SEB104

 SEB104
 Grand Challenges in Science

 SEB113
 Quantitative Methods in Science

 SEB115
 Experimental

| | Science 1 |
|--------------------|---------------------------|
| SEB116 | Experimental Science 2 |
| Year 1, Semester 2 | |
| | |

| MXB100 | Introductory Calculus and Algebra | |
|-------------------------|--|--|
| PVB101 | Physics of the Very Large | |
| PVB102 | Physics of the Very Small | |
| Core Unit Option | | |
| Year 2, Semester 1 | | |
| PVB200 | Computational and Mathematical Physics | |
| PVB203 | Experimental Physics | |
| 2nd major or minor unit | | |
| 2nd major or minor unit | | |
| Year 2, Semester 2 | | |
| PVB202 | Mathematical Methods in Physics | |
| PVB204 | Electromagnetism | |
| 2nd major or minor unit | | |

2nd major or minor unit

Year 3, Semester 1 Materials and **PVB301 Thermal Physics** Classical and **PVB302 Quantum Physics** 2nd major or minor unit 2nd major or minor unit Year 3, Semester 2 Nuclear and Particle **PVB303** Physics **PVB304 Physics Research** 2nd major or minor unit

2nd major or minor unit

Study Area Description

For more details and description on this minor please refer to the **Complementary Studies** for your course at the Faculty's <u>Student Zone</u> under "Your Course" page.

| Unit List | |
|------------------|--|
| Code | Title |
| Select 48cp from | : |
| BVB101 | Foundations of Biology |
| BVB102 | Evolution |
| BVB201 | Biological Processes |
| BVB202 | Experimental Design and Quantitative Methods |
| BVB203 | Plant Biology |
| BVB204 | Ecology |
| BVB301 | Animal Biology |
| BVB305 | Microbiology and the Environment |
| BVB313 | Population Genetics and Molecular Ecology |



Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | UD01 |
| CRICOS | 080479J |
| Duration (full-time) | 4 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,900 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,400 per year full-time (96 credit points) |
| Total credit points | 384 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | SEF Enquiry - Email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

This program has been designed to provide you with a real life exposure to a range of urban development disciplines to understand how your chosen course helps to prepare you for a rewarding career in the built environment. You have the opportunity to collaborate with your peers and teaching staff at QUT and to learn in exciting new learning environments. Throughout the course you will experience a range of site visits and fieldwork that will link the theory in lectures to everyday situations in your chosen field of study. You will learn about a range of career opportunities and professional outcomes that will enable you to optimise your experience and potential career. Your major will provide you with in depth knowledge and expertise in an urban development discipline. You will also have the opportunity to undertake a second major or two minors in an area that will broaden your urban development experience and/or complement your first major.

Course Design

Your QUT Bachelor of Urban Develoment (Honours) degree consists of 384 credit points (32 units) arranged as follows:

(a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

(b) 216 credit points (18 units) comprising one (1) major from the following:

- Construction Management
- •
- Quantity Surveying and Cost Engineering
- •
- Urban and Regional Planning

(c)

96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each) from the options specified for your chosen major.

Pathways to Further Study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs

Domestic Course structure Course Design

Your QUT Bachelor of Urban Develoment (Honours) degree consists of 384 credit points (32 units) arranged as follows:

(a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

(b) 216 credit points (18 units) comprising one (1) major from the following:

- Construction Management
- Quantity Surveying and Cost
- Engineering
- Urban and Regional Planning

(c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each) from the options specified for your chosen major.

International Course structure

Course Design

Your QUT Bachelor of Urban Develoment (Honours) degree consists of 384 credit points (32 units) arranged as follows:

(a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

(b) 216 credit points (18 units) comprising one (1) major from the following:

- Construction Management
- Quantity Surveying and Cost Engineering
- Urban and Regional Planning



(c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each) from the options specified for your chosen major.



Handbook

| Veet | 2019 |
|-----------------------------------|--|
| Year | 2018 |
| QUT code | UD01 |
| CRICOS | 080479J |
| Duration (full-time) | 4 years |
| OP | 12 |
| Rank | 73 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,900 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,400 per year full-time (96 credit points) |
| Total credit points | 384 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry - Email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Carol Hon |
| | sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
 - Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

The QUT Bachelor of Urban Development (Honours) degree with a primary major (Study Area A) in Construction Management is designed to provide you with 'real-life' exposure, and the knowledge and skills to prepare you for rewarding career the Construction, Development and associated industries. With the capacity, will and innovation to contribute to a better built environment, as a work-ready graduate, you will be able to apply sound judgement and expertise in practice managing complex built environments.

Course Design

Your QUT Bachelor of Urban Development (Honours) (Construction Management) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace

learning.

b) 216 credit points (18 units) of Construction Management discipline units

c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Urban Development Core Units

These units will engage you in understanding Urban Development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Construction Management Major Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher order thinking to an advanced level.

Complementary Studies Options

Second Major:

A choice of one second major from:

Urban Development disciplines:

•Urban and Regional Planning Studies •Property

Accountancy

•Applied Economics and Finance

(additional second major choices are currently under development)

Minors:

A choice of two minors from the lists below:

Urban Development disciplines:

•Urban and Regional Planning Studies •Property Development •Property Investment and Finance

•Property Valuation

Other disciplines:

•Language Minors – University Wide Options •<u>University Wide Minors</u>



Special Course Requirements

You are required to obtain a minimum of 80 days of approved construction management industrial experience as part of your Work Integrated Learning core unit.

Professional Recognition

Graduates are eligible for membership of the Australian Institute of Building (AIB)

Pathways to Further Study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs

Domestic Course structure

Your QUT Bachelor of Urban Development (Honours) (Construction Management) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of urban development core units, which includes a work integrated learning unit that requires completion of workplace learning

b) 216 credit points (18 units) of construction management discipline units

c) 96 credit points of complementary studies comprising of either a second major (8 unit set) or two minors (4 unit set each).

Urban development core units

These units will engage you in understanding urban development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Construction management major discipline units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher-order thinking to an advanced level.

Complementary studies options

Complementary studies may be taken as a second major of 96 credit points or two minors of 48 credit points each. Experiential minors in work integrated learning as well as student exchange are also available.

Second majors

A second major provides the opportunity for you to undertake significant studies in a second urban development discipline such as Property Economics, Urban and Regional Planning, Architectural Studies, Accountancy or Applied Economics and Finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowlege and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary non-discipline skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Pathways to further study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant masters and/or doctoral level programs.

International Course structure

Your QUT Bachelor of Urban Development (Honours) (Construction Management) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of urban development core units, which includes a work integrated learning unit that requires completion of workplace learning

b) 216 credit points (18 units) of construction management discipline units

c) 96 credit points of complementary studies comprising of either a second major (8 unit set) or two minors (4 unit set each).

Urban development core units

These units will engage you in understanding urban development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Construction management major discipline units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher order thinking to an advanced level.

Complementary studies options

Complementary studies may be taken as a second major of 96 credit points or two minors of 48 credit points each. Experiential minors in work integrated learning as well as student exchange are also available.

Second majors

A second major provides the opportunity for you to undertake significant studies in a second urban development discipline such as Property Economics, Urban and Regional Planning, Architectural Studies, Accountancy or Applied Economics and Finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowlege and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary non-discipline skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Pathways to further study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be





Bachelor of Urban Development (Honours) (Construction Management)

eligible for discipline relevant masters and/or doctoral level programs.

Sample Structure Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
 Year 3, Semester 1
- Year 3, Semester 2
 Year 4, Semester 1
 Year 4, Semester 2

| Code | Title | |
|------------------------------------|--|--|
| Year 1, Semester | 1 | |
| USB100 | Understanding the Built Environment | |
| UXB110 | Residential Construction | |
| UXB111 | Imagine Construction Management | |
| UXB112 | Introduction to Structures | |
| Year 1, Semester | 2 | |
| BSB113 | Economics | |
| LWS012 | Urban Development Law | |
| UXB113 | Measurement for Construction | |
| UXB114 | Integrated Construction | |
| Year 2, Semester | 1 | |
| UXB210 | Commercial Construction | |
| UXB211 | Building Services | |
| UXB213 | Advanced Measurement for Construction | |
| 2nd Major/Minor u | init | |
| Year 2, Semester | 2 | |
| UXB212 | Designing Structures | |
| UXB214 | Construction Estimating | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 1 | | |
| USB300 | Property Development | |
| UXH310 | High-rise Construction | |
| UXH311 | Contract Administration | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 2 | | |
| UXB301 | Work Integrated Learning Built Environment | |
| SEB701 Work Integrated Learning is | | |

| replaced by UXB3 | 801 from S2, 2017 | |
|----------------------|---|--|
| UXH312 | Construction Legislation | |
| UXH314 | Modern Construction Business | |
| 2nd Major/Minor u | ınit | |
| Year 4, Semester 1 | | |
| UXH300 | Research Methods Built Environment | |
| UXH400-1 | Research Project 1 - Part A | |
| UXH411 | Programming and Scheduling | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 2 | | |
| UXH400-2 | Research Project 1 - Part B | |
| UXH410 | Strategic Construction Management | |
| 2nd Major/Minor unit | | |

2nd Major/Minor unit



Handbook

| Year | 2018 |
|-----------------------------------|--|
| | |
| QUT code | UD01 |
| CRICOS | 080479J |
| Duration (full-time) | 4 years |
| OP | 12 |
| Rank | 73 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,900 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,400 per year full-time (96 credit points) |
| Total credit points | 384 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry - Email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Mr Jason Gray sef.enquiry@qut.edu.au |
| | cononquiry equiloculau |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
 - · Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

The QUT Bachelor of Urban Development (Honours) degree with a primary major (Study Area A) in Quantity Surveying and Cost Engineering is designed to provide you with 'real-life' exposure, and the knowledge and skills to prepare you for rewarding career the Construction, Resources and associated industries. With the capacity, will and innovation to contribute to a better built environment, as a work-ready graduate, you will be able to apply sound judgement and expertise in practice within your chosen field.

Course Design

Your QUT Bachelor of Urban Development (Honours) (Quantity Surveying and Cost Engineering) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

b) 216 credit points (18 units) of Quantity Surveying and Cost Engineering discipline units

c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Urban Development Core Units

These units will engage you in understanding Urban Development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Quantity Surveying and Cost Engineering Major Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher order thinking to an advanced level.

Complementary Studies Options

Second Major:

A choice of one second major from:

Urban Development disciplines:

- •Urban and Regional Planning Studies •Property
- Accountancy
- •Applied Economics and Finance

(additional second major choices are currently under development)

Minors:

A choice of two minors from the lists below:

Urban Development disciplines:

- •Urban and Regional Planning Studies •Property Development
- •Property Investment and Finance •Property Valuation

Other disciplines:

•Language Minors – University Wide Options



Bachelor of Urban Development (Honours) (Quantity Surveying and Cost Engineering)

•University Wide Minors

Special Course Requirements

You are required to obtain a minimum of 80 days of approved quantity surveying and cost engineering industrial experience as part of your Work Integrated Learning core unit.

Professional Recognition

Graduates are eligible for membership of the Australian Institute of Quantity Surveyors (AIQS), the Royal Institution of Chartered Surveyors (RICS) and Board of Quantity Surveyors Malaysia (BQSM).

Pathways to Further Study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs

Domestic Course structure

Your QUT Bachelor of Urban Development (Honours) (Quantity Surveying and Cost Engineering) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of urban development core units, which includes a work integrated learning unit that requires completion of workplace learning

b) 216 credit points (18 units) of quantity surveying and cost engineering discipline units

c) 96 credit points of complementary studies comprising of either a second major (8 unit set) or two minors (4 unit set each).

Urban development core units

These units will engage you in understanding urban development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Quantity surveying and cost engineering major discipline units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher-order thinking to an advanced level.

Complementary studies options

Complementary studies may be taken as a second major of 96 credit points or two minors of 48 credit points each. Experiential minors in work integrated learning as well as student exchange are also available.

Second majors

A second major provides the opportunity for you to undertake significant studies in a second Urban Development discipline such as Property Economics, Urban and Regional Planning, Architectural Studies, Accountancy or Applied Economics and Finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowlege and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary non-discipline skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Pathways to further study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant masters and/or doctoral level programs.

International Course structure

Your QUT Bachelor of Urban Development (Honours) (Quantity Surveying and Cost Engineering) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

b) 216 credit points (18 units) of Quantity Surveying and Cost Engineering discipline units c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Urban Development Core Units

These units will engage you in understanding Urban Development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Quantity Surveying and Cost Engineering Major Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher-order thinking to an advanced level.

Complementary Studies Options

Complementary studies may be taken as a Second Major of 96 credit points or two Minors of 48 credit points each. Experiential minors in Work Integrated Learning as well as student exchange are also available.

Second Majors

A second major provides the opportunity for you to undertake significant studies in a second Urban Development discipline such as Property Economics, Urban and Regional Planning, Architectural Studies, Accountancy or Applied Economics and Finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowlege and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary 'non-discipline' skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Bachelor of Urban Development (Honours) (Quantity Surveying and Cost Engineering)

Pathways to Further Study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs.

Sample Structure

Semesters

- Year 1, Semester 1
- Year 1, Semester 2 •
- Year 2, Semester 1 Year 2, Semester 2 ٠
- Year 3, Semester 1 ٠
- Year 3, Semester 2
- Year 4, Semester 1
 Year 4, Semester 2

| Code | Title | | |
|----------------------|---|--|--|
| Year 1, Semeste | er 1 | | |
| USB100 | Understanding the Built Environment | | |
| UXB110 | Residential Construction | | |
| UXB120 | Introduction to Heavy Engineering Sector Technology | | |
| UXB121 | Imagine Quantity Surveying and Cost Engineering | | |
| Year 1, Semeste | er 2 | | |
| BSB113 | Economics | | |
| LWS012 | Urban Development Law | | |
| UXB113 | Measurement for Construction | | |
| UXB114 | Integrated Construction | | |
| Year 2, Semeste | er 1 | | |
| UXB210 | Commercial Construction | | |
| UXB211 | Building Services | | |
| UXB213 | Advanced Measurement for Construction | | |
| 2nd Major/Minor | r unit | | |
| Year 2, Semeste | er 2 | | |
| UXB214 | Construction Estimating | | |
| UXB220 | Services and Heavy Engineering Measurement | | |
| 2nd Major/Minor unit | | | |
| 2nd Major/Minor unit | | | |
| Year 3, Semeste | Year 3, Semester 1 | | |
| USB300 | Property Development | | |
| UXH310 | High-rise Construction | | |
| UXH311 | Contract Administration | | |
| 2nd Major/Minor unit | | | |
| Year 3, Semester 2 | | | |

| UXB301 | Work Integrated Learning Built Environment | | |
|----------------------|---|--|--|
| | SEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017 | | |
| UXH314 | Modern Construction Business | | |
| UXH321 | Cost Planning and Controls | | |
| 2nd Major/Minor unit | | | |
| Year 4, Semeste | er 1 | | |
| UXH300 | Research Methods Built Environment | | |
| UXH400-1 | Research Project 1 - Part A | | |
| UXH420 | Risk Management in the Resources Sector | | |
| 2nd Major/Minor unit | | | |
| Year 4, Semester 2 | | | |
| UXH312 | Construction Legislation | | |
| UXH400-2 | Research Project 1 - Part B | | |
| 2nd Major/Minor unit | | | |
| 2nd Major/Minor unit | | | |
| | | | |

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | UD01 |
| CRICOS | 080479J |
| Duration (full-time) | 4 years |
| OP | 12 |
| Rank | 73 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,900 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,400 per year full-time (96 credit points) |
| Total credit points | 384 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry - Email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Severine Mayere |
| Coordinator | sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

The QUT Bachelor of Urban Development (Honours) degree with a primary major (Study Area A) in Urban and Regional Planning is designed to provide you with 'real-life' exposure and knowledge and expertise in the field to design and administer plans and policy at neighbourhood, local, regional and state levels. With the capacity and will to contribute to a better built environment, as a work-ready graduate, you will be able to apply your perceptive sensibilities and skills in practice to create sustainable natural and human environments.

Course Design

Your QUT Bachelor of Urban Development (Honours) (Urban and Regional Planning) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

b) 216 credit points (18 units) of Urban and Regional Planning discipline units

c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Urban Development Core Units

These units will engage you in understanding Urban Development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Urban and Regional Planning Major Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher order thinking to an advanced level.

Complementary Studies Options

Second Major:

A choice of one second major from:

Urban Development disciplines:

•Urban Development Construction •Property

Accountancy

•Applied Economics and Finance

(additional second major choices are currently under development)

Minors:

A choice of two minors from the lists below:

Urban Development disciplines:

- Residential Construction
- Administration in Construction
- Building Economics
- Property Development
- •Property Investment and Finance
- Property Valuation

Other disciplines:

Urban Design
 Language Minors – University Wide Options
 <u>University Wide Minors</u>

Professional Recognition

Graduates are eligible for membership of the Planning Institute of Australia (PIA)



Bachelor of Urban Development (Honours) (Urban and Regional Planning)

Pathways to Further Study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs

Domestic Course structure

Your QUT Bachelor of Urban Development (Honours) (Urban and Regional Planning) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of urban development core units, which includes a work integrated learning unit that requires completion of workplace learning

b) 216 credit points (18 units) of urban and regional planning discipline units

c) 96 credit points of complementary studies comprising of either a second major (8 unit set) or two minors (4 unit set each).

Urban development core units

These units will engage you in understanding urban development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Urban and regional planning major discipline units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher-order thinking to an advanced level.

Complementary studies options

Complementary studies may be taken as a second major of 96 credit points or two minors of 48 credit points each. Experiential minors in work integrated learning as well as student exchange are also available.

Second majors

A second major provides the opportunity for you to undertake significant studies in a second Urban Development discipline such as Property Economics, Construction Management, Architectural Studies, Accountancy, Applied Economics and Finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowlege and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary non-discipline' skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Pathways to further study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant masters and/or doctoral level programs.

International Course structure

Your QUT Bachelor of Urban Development (Honours) (Urban and Regional Planning) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

b) 216 credit points (18 units) of Urban and Regional Planning discipline units

c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Urban Development Core Units

These units will engage you in understanding Urban Development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Urban and Regional Planning Major Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher-order thinking to an advanced level.

Complementary Studies Options

Complementary studies may be taken as a Second Major of 96 credit points or two Minors of 48 credit points each. Experiential minors in Work Integrated Learning as well as student exchange are also available.

Second Majors

A second major provides the opportunity for you to undertake significant studies in a second Urban Development discipline such as Property Economics, Construction Management, Architectural Studies, Accountancy, Applied Economics and Finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowlege and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary 'non-discipline' skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Pathways to Further Study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs.

Sample Structure Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
 Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2



Bachelor of Urban Development (Honours) (Urban and Regional Planning)

UXH433

2nd Major/Minor unit

Regional Planning

| CodeTitleYear 1, Semester 1USB100Understanding the Built EnvironmentUXB130History of the Built EnvironmentUXB131Imagine Planning and DesignUXB132Urban AnalysisYear 1, Semester 2BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester 1UXB230Site PlanningUXB231Planning Processes2nd Major/Minor | | | |
|--|------------------------------------|----------------------|--|
| USB100Understanding the Built EnvironmentUXB130History of the Built EnvironmentUXB131Imagine Planning and DesignUXB132Urban AnalysisYear 1, Semester 7BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester 7UXB230Site Planning Processes2nd Major/Minor T2nd Major/Minor TYear 2, Semester 7UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor TYear 3, Semester 7USB300Property DevelopmentUXB330Urban Design2nd Major/Minor TYear 3, Semester 7USB300Property DevelopmentUXB330Urban Design2nd Major/Minor TYear 3, Semester 7UXB301Environmental Analysis and PlanningUXB311Environmental Analysis and PlanningUXB32Transport PlanningUXH331Research Methods Built EnvironmentUXH300Research Project 1 - Part AUXH400-1Research Project 1 - Part BUXH400-2Research Project 1 - Part B | | | |
| USB100Built EnvironmentUXB130History of the Built EnvironmentUXB130Imagine Planning and DesignUXB131Imagine Planning and DesignUXB132Urban AnalysisYear 1, Semester 2BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester 1UXB230Site Planning Processes2nd Major/Minor utYear 2, Semester 2UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor ut2nd Major/Minor Ut2nd Major/Minor Ut2nd Major/Minor Ut2nd Major/Minor UtYear 3, Semester 1USB300Urban DesignUXB330Urban Design2nd Major/Minor UtYear 3, Semester 2UXB301Urban Design2nd Major/Minor UtYear 3, Semester 2UXB301Environmental Analysis and PlanningUXB331Environmental Analysis and PlanningUXB332Transport PlanningUXH301Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Virban Planning PracticeYear 4, Semester 2UXH400-2Research Project 1 - Part B | Year 1, Semester | | |
| UXB130History of the Built EnvironmentUXB131Imagine Planning and DesignUXB132Urban AnalysisYear 1, Semester -BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester -UXB230Site Planning Processes2nd Major/Minor | USB100 | | |
| UXB131Imagine Planning and DesignUXB132Urban AnalysisYear 1, Semester /BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester /UXB230Site Planning Processes2nd Major/Minor // Year 2, Semester /UXB231Planning Processes2nd Major/Minor // Year 2, Semester /UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor // Year 3, Semester /Vear 3, Semester /USB300Urban DesignUXB330Urban DesignUXB330Urban DesignUXB301Environmental Analysis and PlanningVara 3, Semester /UXB301Environmental Analysis and PlanningUXB312Transport Planning is replaced by UXB// Trom S2, 2017UXH331Research Methods Built Environmental Analysis and PlanningUXH301Research Project 1 - Part AUXH400-1Research Project 1 - Part AUXH430Vrban Planning PracticeVara 4, Semester / Part B | UXB130 | History of the Built | |
| UXB132Urban AnalysisYear 1, Semester /BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester /UXB230Site Planning Processes2nd Major/Minor //Planning Processes2nd Major/Minor //Year 2, Semester /UXB231Planning Processes2nd Major/Minor //Year 3, Semester /UXB233Planning Law2nd Major/Minor //Year 3, Semester /USB300Property DevelopmentUXB330Urban Design2nd Major/Minor //Year 3, Semester /UXB330Urban Design2nd Major/Minor //Year 3, Semester /UXB301Work Integrated Learning Built Environmental Analysis and PlanningUXH331Research Project 1UXH330Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH431Urban PlanningUXH400-2Research Project 1 - Part B | UXB131 | Imagine Planning and | |
| Year 1, Semester 2BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester 1UXB230UXB231Planning Processes2nd Major/Minor unitPlanning Processes2nd Major/Minor UnitYear 2, Semester 2UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor UnitPlanning Law2nd Major/Minor UnitYear 3, Semester 1USB300Property DevelopmentUXB330Urban Design2nd Major/Minor UnitYear 3, Semester 1USB300Vork Integrated Learning Built EnvironmentYear 3, Semester 2Work Integrated Learning Built EnvironmentYear 3, Semester 2UXB301UXB301Environmental Analysis and PlanningUXH331Research Methods Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB31 from S2, 2017UXH331PlanningUXH331Vrasport PlanningUXH330Vrban PlanningUXH430Planning Theory and EthicsUXH430Planning Theory and EthicsUXH431Wrban PlanningYear 4, Semester 2Vear 4, Semester 2UXH400-2Research Project 1 - Part B | UXB132 | 0 | |
| BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester IVarban StudiesUXB230Site Planning Processes2nd Major/Minor UTPlanning Processes2nd Major/Minor UTVarban Studien and Conflict ResolutionUXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor UTPlanning Law2nd Major/Minor UTProperty DevelopmentUXB330Urban DesignUXB330Urban Design2nd Major/Minor UTPlanning Built EnvironmentYear 3, Semester IVarban DesignUXB330Urban Design2nd Major/Minor UTPlanningSeB701 Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB31Forwironmental Analysis and PlanningUXH331Research Methods Built EnvironmentVAB322Transport PlanningUXH300Research Methods Built EnvironmentUXH430Virban PlanningUXH430Virban PlanningUXH431Urban PlanningVart ANalysisUXH400-2Research Project 1 - Part B | | - | |
| LWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester IUXB230UXB231Planning Processes2nd Major/Minor unitPlanning Processes2nd Major/Minor UnitVear 2, Semester IUXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor unitImage: Semester IUXB233Planning Law2nd Major/Minor unitImage: Semester IUSB300Property DevelopmentUXB330Urban Design2nd Major/Minor unitImage: Semester IUSB300Urban Design2nd Major/Minor UnitImage: Semester IUSB300Urban Design2nd Major/Minor UnitImage: Semester IUXB330Urban Design2nd Major/Minor UnitImage: Semester IUXB301EnvironmentSEB701 Work Integrated Learning is replaced by UXB31 from S2, 2017UXH331Environmental Analysis and PlanningUXH332Transport PlanningUXH331Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Urban PlanningUXH431Urban PlanningYear 4, Semester ZImage: Semester ZUXH400-2Research Project 1 - Part B | | | |
| UXB134Land Use PlanningYear 2, SemesterPlanning Processes2nd Major/MinorPlanning Processes2nd Major/MinorVear 2, SemesterYear 2, SemesterVear 2, SemesterUXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/MinorVear 3, SemesterYear 3, SemesterVear 3, SemesterUSB300Urban Design2nd Major/MinorVear 0, SemesterUXB330Urban Design2nd Major/MinorVear 10, SemesterUXB300Urban Design2nd Major/MinorVear 3, SemesterUXB301Urban Design2nd Major/MinorVear 10, SemesterVara 3, SemesterVear 10, SemesterUXB301EnvironmentSEB701 Work Integrated Learning is replaced by UXB301From S2, 2017UXH331Environmental Analysis and PlanningUXH332Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Vrban Planning PracticeUXH400-2Research Project 1 - Part B | LWS012 | | |
| Year 2, Semester 1UXB230Site PlanningUXB231Planning Processes2nd Major/Minor unitYear 2, Semester 2UXB232Negotiation and Conflict ResolutionUXB232Negotiation and Conflict ResolutionUXB232Planning Law2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester 1USB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester 2UXB301Environmental Analysis and PlanningUXB301Environmental Analysis and PlanningUXH331Research Planning PlanningUXH332Transport PlanningUXH300Research Methods Built EnvironmentUXH430Planning Theory and EthicsUXH431Urban PlanningUXH400-2Research Project 1 - Part B | UXB133 | Urban Studies | |
| UXB230Site PlanningUXB231Planning Processes2nd Major/MinorI2nd Major/MinorIYear 2, SemesterVUXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/MinorII2nd Major/MinorII2nd Major/MinorVYear 3, SemesterVYear 3, SemesterVUSB300Property DevelopmentUXB330Urban Design2nd Major/MinorII2nd Major/MinorVYear 3, SemesterVYear 3, SemesterVYear 3, SemesterVYear 3, SemesterVVXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB311 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXH300Research Methods Built EnvironmentalUXH400-1Research Project 1 - Part AUXH431Urban PlanningUXH431Vrban PlanningUXH400-2Research Project 1 - Part B | UXB134 | Land Use Planning | |
| UXB231 Planning Processes 2nd Major/Minor unit Planning Value 2nd Major/Minor unit Negotiation and Conflict Resolution VXB232 Negotiation and Conflict Resolution UXB233 Planning Law 2nd Major/Minor unit Planning Law Vagat Semester I USB300 USB300 Urban Design 2nd Major/Minor Unit Planning Built SEB701 Work Integrated Learning is replaced by UXB301 From S2, 2017 UXH331 Environmental Analysis and Planning UXH332 Transport Planning UXH430 Research Methods Built Environment UXH430 Planning Theory and Ethics UXH431 Urban Planning | Year 2, Semester | 1 | |
| 2nd Major/Minor unit 2nd Major/Minor unit Year 2, Semester 2 UXB232 Negotiation and conflict Resolution UXB233 Planning Law 2nd Major/Minor unit 2nd Major/Minor unit 2nd Major/Minor Unit Property Development UXB300 Property Development UXB330 Urban Design 2nd Major/Minor unit 2nd Major/Minor unit Semester 2 UXB301 UXB301 Environment SEB701 Work Integrated Learning is replaced by UXB32 from S2, 2017 UXH331 Analysis and Planning UXH332 Transport Planning UXH300 Research Methods Built Environment UXH430 Planning Theory and Ethics UXH430 Urban Planning UXH431 Urban Planning UXH400-2 Research Project 1 - Part B | UXB230 | Site Planning | |
| 2nd Major/Minor unitYear 2, Semester 2UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor UnitProperty DevelopmentVSB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor UnitProperty DevelopmentUXB300Urban Design2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor UnitProperty Development2nd Major/Minor UnitUrban Design2nd Major/Minor UnitEnvironmentSEB701 Work Integrated Learning Built EnvironmentSemesterUXH331Environmental Analysis and PlanningUXH331Research Methods Built EnvironmentUXH300Research Project 1 - Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | UXB231 | Planning Processes | |
| Year 2, Semester 2UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor UnitYear 3, Semester 1USB300Property DevelopmentUXB330Urban Design2nd Major/Minor UnitUrban Design2nd Major/Minor UnitYear 3, Semester 2UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301Fnovironmental Analysis and PlanningUXB332Transport PlanningUXH331Research Methods Built Environmental Analysis and PlanningUXH300Research Project 1 - Part AUXH430Virban PlanningUXH431Urban PlanningUXH400-2Research Project 1 - Part B | 2nd Major/Minor u | init | |
| UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor UnitProperty DevelopmentUSB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor UnitSEB701 Work Integrated Learning Built Environment2nd Najor/MinorSEB701 Work Integrated Learning is replaced by UXB301Environmental Analysis and PlanningUXH331Environmental Analysis and PlanningUXB332Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Urban Planning PracticeUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | 2nd Major/Minor u | init | |
| UXB232Conflict ResolutionUXB233Planning Law2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unitProperty DevelopmentUSB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unitProperty Development2nd Major/Minor unitProperty Development2nd Major/Minor unitProperty Development2nd Major/Minor unitProperty Development2nd Major/Minor unitProperty Development2nd Major/Minor unitProperty PropertyUXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXH332Transport PlanningUXB332Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Urban Planning PracticeUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | Year 2, Semester | 2 | |
| 2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester IUSB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester 2UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB331 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXB300Research Methods Built EnvironmentVear 4, Semester 1UXH400-1Research Project 1 - Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeVXH400-2Research Project 1 - Part B | UXB232 | | |
| 2nd Major/Minor unitYear 3, Semester 1USB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester 2UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXH332Transport PlanningUXB332Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Vlaban Planning PracticeUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | UXB233 | Planning Law | |
| Year 3, Semester 1USB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester 2Var 3, Semester 2Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXH330Research Methods Built EnvironmentUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | 2nd Major/Minor u | init | |
| USB300Property DevelopmentUXB330Urban Design2nd Major/Minor unitImage: Semester in the semistimation in the semester in the semistimation in the semi | 2nd Major/Minor u | init | |
| USB300DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester 2UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXB332Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Urban PlanningUXH431Urban PlanningUXH400-2Research Project 1 - Part B | Year 3, Semester | 1 | |
| Provide S2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester 2UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXH330Research Methods Built EnvironmentUXH300Research Project 1 - Part AUXH400-1Planning Theory and EthicsUXH431Urban PlanningUXH400-2Research Project 1 - Part B | USB300 | | |
| 2nd Major/Minor unitYear 3, Semester 2Var 3, Semester 2UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXB332Transport PlanningUXB330Research Methods Built EnvironmentUXH300Research Project 1 - Part AUXH400-1Planning Theory and EthicsUXH431Urban Planning PracticeVear 4, Semester 2UXH400-2Research Project 1 - Part B | UXB330 | Urban Design | |
| Year 3, Semester 2UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXB330Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH431Urban PlanningUXH431Urban PlanningUXH400-2Research Project 1 - Part B | 2nd Major/Minor unit | | |
| UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXH332Transport PlanningUXB332Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | 2nd Major/Minor u | init | |
| UXB301Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017Ward StateEnvironmental Analysis and PlanningUXH331Environmental Analysis and PlanningUXB332Transport PlanningUXB332Transport PlanningUXB332Research Methods Built EnvironmentUXH300Research Project 1 - Part AUXH400-1Planning Theory and EthicsUXH430Urban Planning PracticeUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | Year 3, Semester | | |
| SEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXB332Transport PlanningUXB332Transport PlanningUXB332Research Methods Built EnvironmentUXH300Research Project 1 - Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeVAH400-2Research Project 1 - Part B | UXB301 | Learning Built | |
| UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXB332Transport Planning2nd Major/Minor unitImage: Comparison of the second | SEB701 Work Integrated Learning is | | |
| UXB332Transport Planning2nd Major/Minor unitYear 4, Semester 1UXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeYear 4, Semester 2UXH400-2Research Project 1 - Part B | UXH331 | Analysis and | |
| 2nd Major/Minor unitYear 4, Semester 1UXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - UXH430Planning Theory and EthicsUXH431Urban Planning PracticeYear 4, Semester 2Research Project 1 - Part B | UXB332 | • | |
| Year 4, Semester 1UXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeYear 4, Semester 2UXH400-2UXH400-2Research Project 1 - Part B | | | |
| UXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - UXH430Planning Theory and EthicsUXH431Urban Planning PracticeYear 4, Semester 2UXH400-2UXH400-2Research Project 1 - | | | |
| UXH400-1Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeYear 4, Semester 2UXH400-2Research Project 1 - Part B | | Research Methods | |
| UXH430EthicsUXH431Urban Planning PracticeYear 4, Semester 2UXH400-2Research Project 1 - Part B | UXH400-1 | - | |
| Vear 4, Semester 2 UXH400-2 Research Project 1 - Part B | UXH430 | | |
| UXH400-2 Research Project 1 - Part B | UXH431 | • | |
| UXH400-2 Research Project 1 - Part B | Year 4, Semester 2 | | |
| UXH432 Community Planning | | Research Project 1 - | |
| | UXH432 | Community Planning | |



Bachelor of Property Economics

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | UD05 |
| | |
| CRICOS | 080478K |
| Duration (full-time) | 3 years |
| OP | 12 |
| Rank | 73 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$10,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,100 per year full-time (96 credit points) |
| Total credit points | 288 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline | Dr Connie Susilawati |
| Coordinator | sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
 - Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with (4, SA) sound achievement.

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

The Bachelor of Property Economics provides the theory and practical understanding of the role that property plays in the Australian and international economy. In addition the course provides details on the role of the numerous property professionals who assess, develop, value, finance and manage all classes of public and private property. The course is designed for students who have an interest in the role that property plays in the Australian and international economy and have a desire to participate in ensuring that the property industry remains economically and environmentally sustainable and meets the social needs of all members of society.

The course will present you with:

• Diverse perspectives to encourage your spirit of inquiry

• Engaging experiences in the classroom, in the field and with leading industry professionals

• Flexible study choices and the

opportunity to prepare for a range of property careers in the public and private sector

• Relevant subject matter designed to enable you to make a difference by applying property economics to known problems

• Coherent studies which have been carefully designed to prepare you for your introduction into the property industry

Course Design

Your QUT Bachelor of Property Economics degree consists of 288 credit points (24 units) arranged as follows:

(a) 72 credit points (6 units) of Property Economics Core units, which includes a Work Integrated Learning unit that requires completion of 30 days of workplace learning.

(b) 120 credit points (10 units) of Property Economics discipline units
(c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Property Economics Core Units

These units will engage you in understanding property economics from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field, and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Property Economics Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with graduate level units. They focus on developing knowledge, practice and higher order thinking.

Complementary Studies Options

Second Major:

A choice of one second major from:

Urban Development disciplines:

- Urban and Regional Planning Studies
- Urban Development Construction
- Accountancy
- Applied Economics and Finance

(additional second major choices for



property economics are currently under development)

Minors:

A choice of two minors from the lists below:

Urban Development disciplines:

• Property Valuation Accreditation Minor (Extension Minor)

To meet the educational requirements for professional accreditation and membership of the Royal Institution of Chartered Surveyors (RICS) valuation pathway, the educational standards required for those graduates who wish to become Certified Practising Valuers (CPV) with the Australian Property Institute(API); the Valuers Registration Board of Queensland and the Board of Valuers, Appraisers and Estate Agents Malaysia (BOVEA) educational requirements, students will require the Property Valuation Accreditation Minor (48cps). This may be taken as Complementary Studies and comprises the following units: USB243 Property Legislation, USB246 Transaction Process, USB342 Property Software, USB343 Boutique Valuations

- Urban and Regional Planning Studies
- Residential Construction
- Administration in Construction
- Building Economics

Other disciplines:

• Language Minors – University Wide Options

<u>University Wide Minors</u>

Professional Recognition

This degree is accredited by the Australian Property Institute (API) and meets the membership requirements of a Certified Property Practitioner (CPP). With completion of the Property Valuation Accreditation Minor (Property Software, Boutique Valuation, Property Legislation, Transaction Process) this degree meets the additional educational requirements for professional accreditation and membership of the Royal Institution of Chartered Surveyors (RICS) valuation pathway; the Australian Property Institute (API) - Certified Practising Valuers (CVP); the Valuers Registration Board of Queensland; and the Board of Valuers, Appraisers and Estate Agents (BOVEA), Malaysia.

Pathways to Further Study

The QUT Bachelor of Property Economics is located at Level 7 of the Australian Qualifications Framework (AQF). Eligible graduates may continue their studies in this discipline with an additional honours year in (UD10) Bachelor of Property Economics (Honours).

Domestic Course structure

The QUT Bachelor of Property Economics degree consists of 288 credit points (24 units) arranged as follows:

a) 72 credit points (six units) of property economics core units, which includes a work integrated learning unit that requires completion of 30 days of workplace learning

b) 120 credit points (10 units) of property economics discipline units

c) 96 credit points of complementary studies comprising of either a second major (eight unit set) or two minors (four unit set each).

Property economics core units

These units will engage you in understanding property economics from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Property economics discipline units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with graduate level units. They focus on developing knowledge, practice and higher-order thinking.

Complementary studies options

Complementary studies may be taken as a second major of 96 credit points or two minors of 48 credit points each. Experiential minors in work integrated learning as well as student exchange are also available.

Second majors

A second major provides the opportunity for you to undertake significant studies in a second urban development discipline such as construction management, urban and regional planning, accountancy or applied economics and finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowledge and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary non-discipline skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Property valuation accreditation minor This is an extension minor option for property economics students and may be taken as part of your complementary studies. The minor will provide you with additional property valuation studies: to meet the educational requirements for professional accreditation and membership of the Roval Institution of Chartered Surveyors (RICS) valuation pathway; to meet the educational standards required for those graduates who wish to become Certified Practising Valuers (CVP) with the Australian Property Institute (API); and to meet the Valuers Registration Board of Queensland and the Board of Valuers, Appraisers and Estate Agents Malaysia educational requirements.

Pathways to further study

The QUT Bachelor of Property Economics is located at Level 7 of the Australian Qualifications Framework (AQF). Eligible graduates may continue their studies in this discipline with an additional honours year in (UD10) Bachelor of Property Economics (Honours).

International Course structure

The QUT Bachelor of Property Economics degree consists of 288 credit points (24 units) arranged as follows:

a) 72 credit points (6 units) of Property Economics Core units, which includes a Work Integrated Learning unit that requires completion of 30 days of workplace learning.

b) 120 credit points (10 units) of Property Economics discipline units



Bachelor of Property Economics

c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Property Economics Core Units

These units will engage you in understanding property economics from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Property Economics Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with graduate level units. They focus on developing knowledge, practice and higher-order thinking.

Complementary Studies Options

Complementary studies may be taken as a Second Major of 96 credit points or two Minors of 48 credit points each. Experiential minors in Work Integrated Learning as well as student exchange are also available.

Second Majors

A second major provides the opportunity for you to undertake significant studies in a second Urban Development discipline such as Construction Management, Urban and Regional Planning, Accountancy or Applied Economics and Finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowledge and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary 'non-discipline' skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Property Valuation Accreditation Minor This is an extension minor option for property economics students and may be taken as part of your complementary studies. The minor will provide you with additional property valuation studies: to meet the educational requirements for professional accreditation and membership of the Royal Institution of Chartered Surveyors (RICS) valuation pathway; to meet the educational standards required for those graduates who wish to become Certified Practising Valuers (CVP) with the Australian Property Institute (API); and to meet the Valuers Registration Board of Queensland and the Board of Valuers, Appraisers and Estate Agents Malaysia educational requirements.

Pathways to Further Study

The QUT Bachelor of Property Economics is located at Level 7 of the Australian Qualifications Framework (AQF). Eligible graduates may continue their studies in this discipline with an additional honours year in (UD10) **Bachelor of Property Economics** (Honours).

Sample Structure **Semesters**

| ٠ | Year | <u>1, Sen</u> | nester 1 |
|---|------|---------------|----------|
| | | | |

- Year 1, Semester 2
- Year 2, Semester 1 Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2

| Code | Title | |
|----------------------|--|--|
| Year 1, Semester | 1 | |
| USB100 | Understanding the Built Environment | |
| USB140 | Imagine Property | |
| BSB113 | Economics | |
| UXB110 | Residential Construction | |
| Year 1, Semester 2 | | |
| LWS012 | Urban Development Law | |
| UXB134 | Land Use Planning | |
| USB141 | Building Big | |
| USB242 | Experience Property | |
| Year 2, Semester | 1 | |
| USB240 | Market Analysis | |
| USB241 | Money and Wealth | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 2, Semester 2 | | |
| USB244 | Asset Performance | |
| USB245 | Property Investment | |

| | Analysis | |
|--|--|--|
| 2nd Major/Minor unit | | |
| 2nd Major/Minor u | init | |
| Year 3, Semester | 1 | |
| USB300 | Property Development | |
| USB341 | Money and Property | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 2 | | |
| USB344 | Property Project | |
| UXB301 | Work Integrated Learning Built Environment | |
| SEB701 Work Integrated Learning is replaced by UXB301 from Semester 2 2017 | | |

2nd Major/Minor unit

2nd Major/Minor unit



Bachelor of Urban Development

Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | UD40 |
| CRICOS | 056387B |
| Duration (full-time) | 4 years |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Dom. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Andrea Blake; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |



Handbook

| Year | 2018 |
|---------------------------------|---|
| QUT code | UD40 |
| CRICOS | 056387B |
| Duration (full-time) | 4 years |
| OP | 8 |
| Rank | 85 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February This course is available to international students who are eligible for a year or more of Advanced Standing (Credit). |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Andrea Blake; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Carol Hon |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA) of English and one of the following: Maths A, Maths B or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Update

As of 2014, this course will only be available for UD40 continuing students. New students should refer to <u>UD01</u> <u>Bachelor of Urban Development</u> (Honours)(Construction Management)

For further assistance, please contact sef.enquiry@qut.edu.au

Overview

The course is concerned with the management of the overall process of construction projects and provides detailed understanding of project development from conception, through planning and construction to commissioning and maintenance. It develops skills in how to manage people, materials, equipment and plant while focusing on issues such as cost, time, quality, safety and environment. It educates students to become effective construction managers with comprehensive technological knowledge, management principles and communication skills.

Minors

For accreditation purposes you are required to undertake specified minors which will include employment practice. Please refer to <u>your course rules</u> before making your selection.

CONSTRUCTION MANAGEMENT Minor Options

- All students must take the Construction Management Applications Minor, which is an AIB accreditation requirement.
- Your second minor may be taken from anywhere in QUT but must be from outside UD40.

Special Course Requirements

All students are required to obtain a minimum of 80 days of approved construction management industrial experience.

Professional Recognition

This course has been accredited by the Australian Institute of Building.

Domestic Course structure Work Integrated Learning unit

In your final year students are required to undertake 100 days approved industrial experience in the construction or allied field.

Your course

Year 1

You start your studies with foundation units including residential construction and engineering, basic professional learning (including an introduction to research writing), sustainability, land stewardship, urban development economics and building measurement.

Year 2

You build on your knowledge of construction management by studying low-rise commercial construction and engineering, structural engineering, building measurement and estimating, construction-related law, building services engineering, basic business skills and minor study units.

Year 3

You increase your knowledge by studying high-rise construction and advanced structural and formwork design. You extend your management learning in business skills, contract administration and statutory construction law and further engage in your chosen minor study units as well as building your research capabilities.

Year 4

Your final year draws together previous learning and integrates it with more advanced concepts of strategic



Bachelor of Urban Development (Construction Management)

management, program and planning management, and human resources planning, preparing you for entry to the construction industry at managerial level. You have the opportunity to gain interdisciplinary skills via your minor units and specialist skills in advanced construction management and research methods and report writing.

Minors

For accreditation purposes you are required to undertake specified minors which will include employment practice. Please refer to <u>your course rules</u> before making your selection.

Construction management minor options

- All students must take the Construction Management Applications Minor, which is an AIB
- accreditation requirement.
 Your second minor may be taken from anywhere in QUT but must be from outside UD40. The Project Collaboration Minor is highly recommended for students in Construction Management.

International Course structure

Work Integrated Learning unit

In your final year students are required to undertake 100 days approved industrial experience in the construction or allied field.

Your course

Year 1

You start your studies with foundation units including residential construction and engineering, basic professional learning (including an introduction to research writing), sustainability, land stewardship, urban development economics and building measurement.

Year 2

You build on your knowledge of construction management by studying low-rise commercial construction and engineering, structural engineering, building measurement and estimating, construction-related law, building services engineering, basic business skills and minor study units.

Year 3

You increase your knowledge by studying high-rise construction and advanced structural and formwork design. You extend your management learning in business skills, contract administration and statutory construction law and further engage in your chosen minor study units as well as building your research capabilities.

Year 4

Your final year draws together previous learning and integrates it with more advanced concepts of strategic management, program and planning management, and human resources planning, preparing you for entry to the construction industry at managerial level. You have the opportunity to gain interdisciplinary skills via your minor units and specialist skills in advanced construction management and research methods and report writing.

Minors

For accreditation purposes you are required to undertake specified minors which will include employment practice. Please refer to <u>your course rules</u> before making your selection.

Construction management minor options

- All students must take the Construction Management Applications Minor, which is an AIB accreditation requirement.
- Your second minor may be taken from anywhere in QUT but must be from outside UD40. The Project Collaboration Minor is highly recommended for students in Construction Management.

Sample Structure Course Updates

A number of changes have been made to Science and Engineering Faculty courses. From 2014, first year core units in UD40 Bachelor of Urban Development have been recoded, renamed or discontinued. To see how these changes affect you, please consult the unit replacement table below in conjuction with the course structure. Affected Study Plans are being updated to reflect the changes. Please contact the Faculty if you have any concerns.

UD40 Unit Replacement Table

Semesters

- Year 1 Semester 1
- Year 1- Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
 Year 4 Semester 2

| Code | Title | |
|---------------------|-----------------------------------|--|
| Year 1 - Semester 1 | | |
| ENB100 | Engineering and Sustainability | |

| DEB100 | Design and Sustainability |
|---|---|
| [UDB100 is replace ENB100/EGB100 | ed by or DEB100 from 2014] |
| USB100 | Understanding the Built Environment |
| [UDB101 is replace 2014] | ced by USB100 from |
| UXB110 | Residential Construction |
| - | ced by UXB110 from |
| 2014] UXB112 | Introduction to |
| | Structures ed by UXB112 from |
| 2014] | 0 |
| Year 1- Semester | |
| BEB112 | Principles of Project Management |
| 2014] | ed by BEB112 from |
| BSB113 | Economics |
| [UDB104 is replace 2014] | ed by BSB113 from |
| UXB114 | Integrated Construction |
| [UDB112 is replace 2014] | ed by UXB114 from |
| UXB113 | Measurement for Construction |
| [UDB113 is replace 2014] | ed by UXB113 from |
| Year 2 - Semester | r 1 |
| UXB210 | Commercial Construction |
| | |
| | ced by UXB210 from |
| 2015] | ed by UXB210 from |
| 2015] UXB212 | eed by UXB210 from Designing Structures |
| 2015] UXB212 | eed by UXB210 from Designing Structures eed by UXB212 from |
| 2015] UXB212 [UDB211 is replace | eed by UXB210 from Designing Structures |
| 2015] UXB212 [UDB211 is replac 2015] UXB213 | Designing Structures ed by UXB212 from Advanced Measurement for |
| 2015] UXB212 [UDB211 is replace 2015] UXB213 [UDB212 is replace | Advanced Measurement for Construction |
| 2015] UXB212 [UDB211 is replace 2015] UXB213 [UDB212 is replace 2015] UXB214 | Advanced Measurement for Construction Construction Construction |
| 2015] UXB212 [UDB211 is replace 2015] UXB213 [UDB212 is replace 2015] UXB214 [UDB213 is replace | eed by UXB210 from Designing Structures eed by UXB212 from Advanced Measurement for Construction eed by UXB213 from Construction Estimating eed by UXB214 from |
| 2015] UXB212 [UDB211 is replace 2015] UXB213 [UDB212 is replace 2015] UXB214 [UDB213 is replace 2015] | eed by UXB210 from Designing Structures eed by UXB212 from Advanced Measurement for Construction eed by UXB213 from Construction Estimating eed by UXB214 from |
| 2015] UXB212 [UDB211 is replace 2015] UXB213 [UDB212 is replace 2015] UXB214 [UDB213 is replace 2015] Year 2 - Semester LWS012 | Designing Structures ced by UXB210 from Designing Structures ced by UXB212 from Advanced Measurement for Construction ced by UXB213 from Construction Estimating ced by UXB214 from r 2 Urban Development |
| 2015] UXB212 [UDB211 is replace 2015] UXB213 [UDB212 is replace 2015] UXB214 [UDB213 is replace 2015] Year 2 - Semester LWS012 [UDB102 is replace | Designing Structuresby UXB210 fromDesigning Structuresby UXB212 fromAdvancedMeasurement for Constructionby UXB213 fromConstructionby UXB214 fromcUrban Development Law |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/courseCode=UD40&courseID=33588. CRICOS No.00213J



Bachelor of Urban Development (Construction Management)

UXH410

2017]

2017] From 2017 BEB801

UXH321

UXH410

UXB301

Strategic

Project 1

Controls Strategic

Construction Management Work Integrated Learning Built

Environment

Cost Planning and

[UDB410 is replaced by UXH410 from

[UDB302 is replaced by USB300 from

Construction Management

| Building ServicesUXB211 from 2015]Minor unitYear 3 - SemesterIII SemesterUXH310 is replaced by UXH310 from 2016]EGB121Building ServicesEGB121Construction MechanicsContract AdministrationQUAB312 is replaced by UXH311 from 2016]UXH311 is replaced by UXH311 from 2016]Vera 3 - SemesterVIXH312 is replaced by UXH311 from 2016]IUXH312 is replaced by UXH314 from 2016]QUAB314 is replaced by UXH312 from 2016]UXH312Poject Financing 1QUAB314 is replaced by UXH312 from 2016]UXH312 from 2016]QUAB314 is replaced by UXH312 from 2016]QUAB314 is replaced by UXH312 from 2016]QUAB313 is replaced by UXH300 from 2017]QUAH411Project Financing 1QUAH411Project Methods 2017]QUAH411Project Methods 2017]QUAH411Project Methods 2017]QUAH411Project Methods 2017]QUAH411Project Methods 2017]QUAH411Project Methods 2017] <td colsp<="" th=""><th>Bacheler er er</th><th></th></td> | <th>Bacheler er er</th> <th></th> | Bacheler er er | |
|--|-----------------------------------|-------------------|--|
| 2015]Minor unitYear 3 - Semester IUXH310High-rise Construction[UDB310 is replaced by UXH310 from 2016]EGB121EGB121Engineering Mechanics[UDB311 is replaced by EGB121 from 2016]Contract Administration[UDB312 is replaced by UXH311 from 2016]Construction Business[UDB312 is replaced by UXH311 from 2016]Modern Construction Business[UDB202 is replaced by UXH314 from 2016]Modern Construction Business[UDB202 is replaced by UXH312 from 2016]Construction Legislation[UDB314 is replaced by UXH312 from 2016]Project Financing EB114[UDB314 is replaced by BEB114 from 2016]Project Financing[UDB313 is replaced by UXH300 from 2017]SeB701[UDB301 is replaced by UXH300 from 2017]Programming and Scheduling[UDB313 is replaced by UXH300 from 2017]Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Programming and Scheduling[UXH300Research Methods Built Environment[UXH411Programming and Scheduling[UXH411Programming and Scheduling[UXH300Research Methods Built Environment[UXH300Research Methods Built Environment[UDB313 is replaced by UXH411 from Development[UDB302Programming and Scheduling[UXH310Research Methods Built Environment[UXH311Scheduling[UXH312Research Methods Schedu | UXB211 | Building Services | |
| Minor unitYear 3 - SemesterUXH310High-rise Construction[UDB310 is replaced by UXH310 from 2016]Engineering Mechanics[UDB311 is replaced by EGB121 from 2016]Contract Administration[UDB312 is replaced by UXH311 from 2016]Contract Administration[UDB312 is replaced by UXH311 from 2016]Modern Construction Business[UDB312 is replaced by UXH314 from 2016]Modern Construction Business[UDB202 is replaced by UXH314 from 2016]Construction Legislation[UDB314 is replaced by UXH312 from 2016]Construction Legislation[UDB314 is replaced by UXH312 from 2016]Nore Financing 1[UDB314 is replaced by BEB114 from 2016]Project Financing 1[UDB313 is replaced by UXH300 from 2017]Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]Programming and Scheduling[UDB313 is replaced by UXH311 from 2017]Programming and Scheduling[UDB313 is replaced by UXH300 from 2017]Minor unitFrom 2017VIXH311UXH411Programming and Scheduling[UXH300Research Methods Built Environment[UXH310Programming and Scheduling[UXH311Programming and Scheduling[UDB302Property Development[UDB302Property Development[UDB302Project 1[UDB302Project 1[UDB302Project 1[UDB302Project 1[UDB302P | | ed by UXB211 from | |
| Year 3 - SemesterUXH310High-rise Construction[UDB310 is replaced by UXH310 from 2016]EGB121Engineering Mechanics[UDB311 is replaced by EGB121 from 2016]UXH311Contract Administration[UDB312 is replaced by UXH311 from 2016]Winor unitYear 3 - SemesterUXH314Modern Construction Business[UDB202 is replaced by UXH314 from 2016]UXH312Construction Business[UDB202 is replaced by UXH312 from 2016]UXH312Construction Business[UDB203 is replaced by UXH312 from 2016]UXH312Variant from 2016]UXH312Variant from 2016]UXH314 is replaced by UXH312 from 2016]BEB114Project Financing Project Financing[UDB420 is replaced by BEB114 from 2016]Minor unitYear 4 - SemesterSEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]UXH411Programming and Scheduling(UDB313 is replaced by UXH411 from 2017]UXH300Research Methods Built EnvironmentUXH300Programming and SchedulingUXH411Programming and SchedulingUXH411Programming and SchedulingUXH411Programming and SchedulingUXH411Programming and SchedulingUXH411Programming and SchedulingUXH411Property DevelopmentMinor U | - | | |
| UXH310High-rise Construction[UDB310 is replaced by UXH310 from 2016]EGB121Engineering Mechanics[UDB311 is replaced by EGB121 from 2016]UXH311Contract Administration[UDB312 is replaced by UXH311 from 2016]Minor unitYear 3 - Semeset[UDB202 is replaced by UXH314 from 2016]UXH312Modern Construction Business[UDB202 is replaced by UXH314 from 2016]UXH312Construction Legislation[UDB202 is replaced by UXH312 from 2016][UDB314 is replaced by UXH312 from 2016][UDB314 is replaced by BEB114 from 2016][UDB420 is replaced by BEB114 from 2016][UDB420 is replaced by UXH312 from 2016][UDB420 is replaced by UXH312 from 2016][UDB420 is replaced by UXH312 from 2016][UDB301 is replaced by UXH300 from 2017][UXH300Research Methods Built Environment 2017][UDB301 is replaced by UXH300 from 2017][UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017][UXH300Research Methods Built Environment[UXH300Research Methods Built Environment[UXH300Research Methods Built Environment[UXH300Research Methods Built Environment[UDB313 is replaced by UXH411 from Scheduling[UXH300Research Methods Built Environment[UXH300Research Methods Built Environment[UXH300Research Methods Built Environment[UXH311Pr | Year 3 - Semester | r 1 | |
| UXH310Construction[UDB310 is replaced by UXH310 from 2016]EGB121Engineering Mechanics[UDB311 is replaced by EGB121 from 2016]UXH311Contract Administration[UDB312 is replaced by UXH311 from 2016]Minor unitYear 3 - SemestedYear 3 - Semested by UXH311 from 2016]UXH314Modern Construction Business[UDB202 is replaced by UXH314 from 2016]UXH312Construction Legislation[UDB202 is replaced by UXH312 from 2016]UXH312Construction Legislation[UDB314 is replaced by UXH312 from 2016][UDB420 is replaced by UXH312 from 2016]Minor unitYear 4 - SemestedYear 4 - Semested[UDB301 is replaced by UXH300 from 2017]UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]IUXH411Programming and Scheduling[UXH300Research Methods Built Environment[UDB313 is replaced by UXH411 from 2017]UXH411Programming and SchedulingUXH300Research Methods Built Environment[UDB313 is replaced by UXH411 from SchedulingUXH300Research Methods Built Environment[UDB313 is replaced by UXH411 from Scheduling[UDB314]Programming and SchedulingUXH300Research Methods Built Environment[UDB302Property Development ProcessBEB801Project 1UDB302Development ProcessBEB80 | | | |
| 2016]EGB121Engineering Mechanics[UDB311 is replaced by EGB121 from 2016]UXH311Contract Administration[UDB312 is replaced by UXH311 from 2016]Minor unitYear 3 - SemesterUXH314Modern Construction Business[UDB202 is replaced by UXH314 from 2016]UXH312Construction Legislation[UDB314 is replaced by UXH312 from 2016]BEB114Project Financing[UDB420 is replaced by BEB114 from 2016]BEB114Project Financing[UDB420 is replaced by BEB114 from 2016]Minor unitYear 4 - SemesterSEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]UXH300Research Methods Built Environment[UDB313 is replaced by UXH411 from 2017]UXH300Research Methods Built Environment[UXH300Research Methods Built EnvironmentUXH301Programming and SchedulingUXH300Research Methods Built EnvironmentUXH300Research Methods Built EnvironmentUXH300Research Methods Built EnvironmentUXH300Research Methods Built EnvironmentUXH300Research Methods Built EnvironmentUXH300Research Methods Built EnvironmentUXH300Research Methods Built EnvironmentUXH301 </td <td></td> <td>Construction</td> | | Construction | |
| EGB121Mechanics[UDB311 is replaced by EGB121 from 2016]UXH311Contract Administration[UDB312 is replaced by UXH311 from 2016]Minor unitYear 3 - SemesterUXH314Modern Construction Business[UDB202 is replaced by UXH314 from 2016]UXH312Construction Legislation[UDB314 is replaced by UXH312 from 2016]BEB114Project Financing[UDB3420 is replaced by UXH312 from 2016]BEB114Project Financing[UDB420 is replaced by UXH312 from 2016]SEB701Seber 1SEB701Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH300Research Methods Built Environment[UDB313 is replaced by UXH411 from 2017]UXH300Programming and Scheduling(UXH300Research Methods Built Environment[UXH300Research Methods Built Environment(UXH300Programming and Scheduling(UXH300Programming and Scheduling(UXH311Programming and Scheduling(UXH312Project 1UXH312Development ProcessBEB801Project 1UDB302Development Process(UDB316 is replaced by UXH321 from(UDB316 is replaced by UXH321 from | | - | |
| 2016]UXH311Contract Administration[UDB312 is replaced by UXH311 from 2016]Minor unitYear 3 - SemesterUXH314Modern Construction Business[UDB202 is replaced by UXH314 from 2016]UXH312Construction Legislation[UDB314 is replaced by UXH312 from 2016]IQDB314 is replaced by BEB114 from 2016]BEB114Project Financing [UDB420 is replaced by BEB114 from 2016]Minor unitYear 4 - SemesterSEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH300Research Methods Built Environment[UDB313 is replaced by UXH411 from Scheduling[UXH411Programming and SchedulingUXH300Research Methods Built EnvironmentUXH300Programming and SchedulingUXH300Programming and SchedulingUXH300Programming and SchedulingUXH300Programming and SchedulingUXH300Programming and SchedulingUXH300Programming and SchedulingUXH300Programming and SchedulingUXH300Programming and SchedulingUXH300Programming and SchedulingUXH300Programming and SchedulingUXH311Programming and SchedulingUXH301 | EGB121 | u | |
| UXH311Administration[UDB312 is replaced by UXH311 from 2016]Winor unitYear 3 - SemesterUXH314Modern Construction Business[UDB202 is replaced by UXH314 from 2016]UXH312Construction Legislation[UDB314 is replaced by UXH312 from 2016][UDB420 is replaced by UXH312 from 2016]BEB114Project Financing[UDB420 is replaced by BEB114 from 2016]SEB701Work Integrated Learning 1Var 4 - SemesterSEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH300Research Methods Built Environment[UXH411Programming and Scheduling[UXH411Programming and SchedulingUXH300Research Methods Built EnvironmentUXH300Research Methods Built EnvironmentUXH300Research Methods Built EnvironmentUXH300Research Methods Built EnvironmentUXH300Research Methods Built EnvironmentUXH300Research Methods Built EnvironmentUXH311Programming and SchedulingUXH321Property Development ProcessUXH321Cost Planning and ControlsUXH321Cost Planning and Controls | | - | |
| 2016]Minor unitYear 3 - Semester /Var 3 - Semester /UXH314Modern Construction Business[UDB202 is replaced by UXH314 from 2016]UXH312Construction Legislation[UDB314 is replaced by UXH312 from 2016]BEB114Project Financing [UDB420 is replaced by BEB114 from 2016]BEB114Project Financing[UDB420 is replaced by BEB114 from 2016]Minor unitWork Integrated Learning 1Year 4 - SemesterSEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Programming and Scheduling[UXH300Research Methods Built Environment[UXH300Research Methods Built Environment[UXH300Programming and Scheduling[UXH300Programming and Scheduling[UXH300Programming and Scheduling[UXH300Property Development[UXH300Property Development[UXH311Programming and Scheduling[UXH411Project 1[UDB302Development Process[UDB316 is replaced by UXH321 from[UDB316 is replaced by UXH321 from | UXH311 | | |
| Year 3 - Semester JUXH314Modern Construction Business[UDB202 is replaced by UXH314 from 2016]UXH312Construction Legislation[UDB314 is replaced by UXH312 from 2016]BEB114Project Financing[UDB420 is replaced by BEB114 from 2016]Minor unitYear 4 - SemesterSEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH300Research Methods Built Environment[UXH300Programming and Scheduling[UXH411Programming and SchedulingUXH300Programming and SchedulingUXH411Programming and SchedulingUXH311Programming and SchedulingUXH321Development Process[UDB316 is replaced by UXH321 from | • • | ed by UXH311 from | |
| UXH314Modern Construction Business[UDB202 is replaced by UXH314 from 2016]UXH312Construction Legislation[UDB314 is replaced by UXH312 from 2016]BEB114Project Financing[UDB420 is replaced by BEB114 from 2016]Minor unitYear 4 - SemesterSEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH300Programming and Scheduling[UXH300Programming and SchedulingUXH411Programming and SchedulingUXH300Programming and SchedulingUXH300Programming and SchedulingUXH300Programming and SchedulingUXH311Programming and SchedulingUXH311Programming and SchedulingUXH411Programming and SchedulingUXH311Programming and SchedulingUXH311Programming and SchedulingUXH311Programming and SchedulingUXH312Project 1UDB302Development Process[UDB316 is replaced by UXH321 from | Minor unit | | |
| UXH314Business[UDB202 is replaced by UXH314 from 2016]UXH312Construction Legislation[UDB314 is replaced by UXH312 from 2016]BEB114Project Financing[UDB420 is replaced by BEB114 from 2016]Minor unitYear 4 - SemesterSEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017Minor unitFrom 2017UXH300Research Methods Built Environment[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH300Programming and Scheduling[UXH411Programming and SchedulingUXH300Programming and SchedulingUXH300Programming and SchedulingUXH311Programming and SchedulingUXH411Programming and SchedulingUXH311Programming and SchedulingUXH311Programming and SchedulingUXH311Programming and SchedulingUXH311Programming and SchedulingUXH311Programming and SchedulingUXH312Property DevelopmentDasagaProject 1UDB302Development Process[UDB316 is replaced by UXH321 from | Year 3 - Semester | r 2 | |
| 2016]UXH312Construction Legislation[UDB314 is replaced by UXH312 from 2016]BEB114Project Financing[UDB420 is replaced by BEB114 from 2016]Minor unitYear 4 - SemesterSEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH411Research Methods Built Environment[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH300Research Methods Built Environment[UDB316 is replaced by UXH411 from SchedulingUXH411Programming and SchedulingUXH411Programming and SchedulingUXH411Programming and SchedulingUXH411Programming and SchedulingUXH411Programming and SchedulingUXH411Programming and SchedulingUXH411Image Property DevelopmentUXH411Project 1UDB302Development Process[UDB316 is replaced by UXH321 from | UXH314 | | |
| UXH312Legislation[UDB314 is replaced by UXH312 from 2016]BEB114Project Financing[UDB420 is replaced by BEB114 from 2016]Minor unitYear 4 - SemesterSEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017Minor unitFrom 2017UXH300Research Methods Built Environment[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH300Programming and Scheduling[UDB302Property DevelopmentMinor UnitYear 4 - SemesterBEB801Project 1UDB302Development Process[UDB316 is replaced by UXH321 from | | ed by UXH314 from | |
| 2016]BEB114Project Financing[UDB420 is replaced by BEB114 from 2016]Minor unitYear 4 - SemesterSEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH300Research Methods Built Environment[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH300Research Methods Built Environment[UXH300Research Methods Built EnvironmentUXH300Programming and SchedulingUXH300Programming and SchedulingUXH300Property DevelopmentUXH411Programming and SchedulingUXH301Property DevelopmentUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | UXH312 | | |
| Interview of the second | | ed by UXH312 from | |
| 2016]Minor unitYear 4 - Semester JSEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]Programming and SchedulingUXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Programming and Scheduling[UXH300Research Methods Built EnvironmentUXH300Programming and SchedulingUXH411Programming and SchedulingUSB300Property DevelopmentMinor UnitProgramming and SchedulingYear 4 - Semester 2BEB801Project 1UDB302Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | BEB114 | Project Financing | |
| Year 4 - Semester ISEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]Programming and SchedulingUXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Programming and SchedulingMinor unitProgramming and SchedulingFrom 2017VXH411 from 2017UXH300Research Methods Built EnvironmentUXH300Programming and SchedulingUXH411Programming and SchedulingUSB300Property DevelopmentMinor UnitProgramming and SchedulingYear 4 - Semester 2Project 1BEB801Project 1UDB302Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | | ed by BEB114 from | |
| SEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]Programming and SchedulingUXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]WINOR UNTH411 from 2017]Minor unitVFrom 2017Minor UNITUXH300Research Methods Built EnvironmentUXH411Programming and SchedulingUXH411Programming and SchedulingUSB300Property DevelopmentMinor UnitProperty DevelopmentYear 4 - Semester 2Project 1 Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | Minor unit | | |
| SEB701Work Integrated Learning 1UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]Programming and SchedulingUXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]WINOR UNTH411 from 2017]Minor unitVFrom 2017Minor UNITUXH300Research Methods Built EnvironmentUXH411Programming and SchedulingUXH411Programming and SchedulingUSB300Property DevelopmentMinor UnitProperty DevelopmentYear 4 - Semester 2Project 1 Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | Year 4 - Semester | r 1 | |
| UXH300Research Methods Built Environment[UDB301 is replaced by UXH300 from 2017]UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH300Research Methods Built EnvironmentUXH411Programming and SchedulingUXH411Programming and SchedulingUXH411Programming and SchedulingUXH411Programming and SchedulingUSB300Property DevelopmentMinor UnitProperty DevelopmentYear 4 - Semester 2BEB801Project 1UDB302Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | | Work Integrated | |
| 2017]UXH411Programming and Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH300Research Methods Built EnvironmentUXH411Programming and SchedulingUSB300Property DevelopmentMinor UnitProgerty DevelopmentYear 4 - Semester 2BEB801Project 1 Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | UXH300 | Research Methods | |
| OXH411Scheduling[UDB313 is replaced by UXH411 from 2017]Minor unitFrom 2017UXH300Research Methods Built EnvironmentUXH411Programming and SchedulingUSB300Property DevelopmentMinor UnitProgramming and SchedulingYear 4 - Semester 2BEB801Project 1UDB302Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | • | | |
| 2017]Minor unitFrom 2017UXH300Research Methods Built EnvironmentUXH411Programming and SchedulingUSB300Property DevelopmentMinor UnitProperty DevelopmentYear 4 - Semester 2Project 1 Development ProcessBEB801Project 1 Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | UXH411 | | |
| From 2017UXH300Research Methods Built EnvironmentUXH411Programming and SchedulingUSB300Property DevelopmentMinor UnitProperty DevelopmentYear 4 - Semester 2Project 1BEB801Project 1UDB302Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | | ed by UXH411 from | |
| UXH300Research Methods Built EnvironmentUXH411Programming and SchedulingUSB300Property DevelopmentMinor UnitProgerty DevelopmentYear 4 - SemesterProject 1BEB801Project 1UDB302Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | Minor unit | | |
| UXH300Built EnvironmentUXH411Programming and SchedulingUSB300Property DevelopmentMinor UnitProperty DevelopmentYear 4 - Semester 2Project 1BEB801Project 1UDB302Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | From 2017 | | |
| UXH411SchedulingUSB300Property DevelopmentMinor UnitYear 4 - Semester >BEB801Project 1UDB302Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | UXH300 | | |
| USB300DevelopmentMinor UnitYear 4 - Semester 2BEB801Project 1UDB302Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | UXH411 | | |
| Year 4 - Semester 2BEB801Project 1UDB302Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | USB300 | | |
| BEB801Project 1UDB302Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | Minor Unit | | |
| BEB801Project 1UDB302Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | Year 4 - Semester | r 2 | |
| UDB302Development ProcessUXH321Cost Planning and Controls[UDB316 is replaced by UXH321 from | | | |
| UXH321 Cost Planning and Controls [UDB316 is replaced by UXH321 from | | - | |
| [UDB316 is replaced by UXH321 from | UXH321 | Cost Planning and | |
| | | | |



Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | UD40 |
| CRICOS | 056387B |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 80 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Dom. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Andrea Blake; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Connie Susilawati |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA) of English and one of the following: Maths A, Maths B or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Update

As of 2014, this course will only be available for UD40 continuing students. New students should refer to <u>UD05</u> <u>Bachelor of Property Economics</u>

For further assistance, please contact sef.enquiry@qut.edu.au

Overview

This course is concerned with all aspects of property - investment, asset management, development, valuation and research - with a focus on finance and on the commercial property market sector.

Professional Recognition

The 4 year degree has professional recognition from the Australian Property Institute, the Valuers' Registration Board of Queensland, and from the Royal Institution of Chartered Surveyors.

Special Course Requirements

You are required to obtain a minimum of 30 days approved professional work experience.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Second Majors and Minors

In your final two years you will have the opportunity to undertake a major (8 units) or 2 minors (4 units each) from other areas of interest. Please refer to <u>your course rules</u> before making your selection.

PROPERTY ECONOMICS Second Major and Minor Options

Second Major:

A second major from anywhere in QUT

Minors:

Two minors from anywhere in QUT. Remember if you take two Minors one Minor must be from outside of your course.

Domestic Course structure Work Integrated Learning unit

Students are required to obtain a minimum of 30 days approved professional work experience.

Your course

Year 1

You are introduced to land management, sustainability, construction, economics, law and fundamental property valuation practice. You will have a preliminary understanding of the knowledge required of a property professional including factors that influence the value of property. You develop verbal and written communication skills and work collaboratively on projects with other students.

Year 2

You further develop skills in applying analytical problem solving in property valuation, investment analysis and property development. You continue to build your knowledge and skills in planning and urban development, urban economics, and law associated with interests in land and property transactions. Focus is maintained on developing written and verbal communication to a professional standard. You develop an understanding of your future role as a property professional.

Year 3

You collaborate with other students in related disciplines to determine the feasibility of a hypothetical development project. You explore property finance and property and asset management and



Bachelor of Urban Development (Property Economics)

hone research expertise. Guest lectures from leading industry practitioners and industry-focused workshops are a feature. You also embark on a specialist focus through elective major/minor units in your chosen specialisation.

Year 4

You continue to specialise in your chosen area of study through elective major/minor units. You develop skills in property taxation, property marketing and real estate practice. These property skills are supplemented by business study which provides you with a useful understanding of commercial enterprise. The year culminates with industryfocused learning experiences including a work integrated learning unit to ensure you are workforce ready.

Second major and minors

In your final two years you will have the opportunity to undertake a major (8 units) or 2 minors (4 units each) from other areas of interest. Please refer to your course rules before making your selection.

Property economics second major and minor options

Second Major:

 A second major from anywhere in QUT

Minors:

• Two minors from anywhere in QUT. Remember if you take two Minors one Minor must be from outside of your course.

International Course structure

Work Integrated Learning unit

Students are required to obtain a minimum of 30 days approved professional work experience.

Your course

Year 1

You are introduced to land management, sustainability, construction, economics, law and fundamental property valuation practice. You will have a preliminary understanding of the knowledge required of a property professional including factors that influence the value of property. You develop verbal and written communication skills and work collaboratively on projects with other students.

Year 2

You further develop skills in applying analytical problem solving in property valuation, investment analysis and property development. You continue to build your knowledge and skills in planning and urban development, urban economics, and law associated with interests in land and property transactions. Focus is maintained on developing written and verbal communication to a professional standard. You develop an understanding of your future role as a property professional.

Year 3

You collaborate with other students in related disciplines to determine the feasibility of a hypothetical development project. You explore property finance and property and asset management and hone research expertise. Guest lectures from leading industry practitioners and industry-focused workshops are a feature. You also embark on a specialist focus through elective major/minor units in your chosen specialisation.

Year 4

You continue to specialise in your chosen area of study through elective major/minor units. You develop skills in property taxation, property marketing and real estate practice. These property skills are supplemented by business study which provides you with a useful understanding of commercial enterprise. The year culminates with industryfocused learning experiences including a work integrated learning unit to ensure you are workforce ready.

Second major and minors

In your final two years you will have the opportunity to undertake a major (8 units) or 2 minors (4 units each) from other areas of interest. Please refer to your course rules before making your selection.

Property economics second major and minor options

Second Major:

· A second major from anywhere in QUT

Minors:

Two minors from anywhere in QUT. Remember if you take two Minors one Minor must be from outside of your course.

Sample Structure **Course Updates**

A number of changes have been made to Science and Engineering Faculty courses. From 2014, first year core units

in UD40 Bachelor of Urban Development have been recoded, renamed or discontinued. To see how these changes affect you, please consult the unit replacement table below in conjuction with the course structure. Affected Study Plans are being updated to reflect the changes. Please contact the Faculty if you have any concerns.

UD40 Unit Replacement Table

Semesters

- Year 1 Semester 1
- Year 1- Semester 2
- Year 2 Semester 1
- Year 2 Semester 2 Year 3 - Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
 Year 4 Semester 2

| Code | Title | |
|---|--|--|
| Year 1 - Semester 1 | | |
| ENB100 | Engineering and Sustainability | |
| DEB100 | Design and Sustainability | |
| [UDB100 is replaced by ENB100/EGB100 or DEB100 from 2014] | | |
| USB100 | Understanding the Built Environment | |
| [UDB101 is replaced 2014] | d by USB100 from | |
| UXB110 | Residential Construction | |
| [UDB110 is replaced by UXB110 from 2014] | | |
| USB140 | Imagine Property | |
| [UDB140 is replaced by USB140 from 2014] | | |
| Year 1- Semester 2 | | |
| | | |
| BEB112 | Principles of Project Management | |
| BEB112 [UDB200 is replaced 2014] | Management | |
| [UDB200 is replaced | Management | |
| [UDB200 is replaced 2014] | Management d by BEB112 from Urban Development Law | |
| [UDB200 is replaced 2014] LWS012 [UDB102 is replaced | Management d by BEB112 from Urban Development Law | |
| [UDB200 is replaced 2014] LWS012 [UDB102 is replaced 2014] | Management d by BEB112 from Urban Development Law d by LWS012 from Economics | |
| [UDB200 is replaced 2014] LWS012 [UDB102 is replaced 2014] BSB113 [UDB104 is replaced | Management d by BEB112 from Urban Development Law d by LWS012 from Economics | |
| [UDB200 is replaced 2014] LWS012 [UDB102 is replaced 2014] BSB113 [UDB104 is replaced 2014] | Management d by BEB112 from Urban Development Law d by LWS012 from Economics d by BSB113 from Building Big | |
| [UDB200 is replaced 2014] LWS012 [UDB102 is replaced 2014] BSB113 [UDB104 is replaced 2014] USB141 [UDB141 is replaced | Management d by BEB112 from Urban Development Law d by LWS012 from Economics d by BSB113 from Building Big d by USB141 from | |
| [UDB200 is replaced 2014] LWS012 [UDB102 is replaced 2014] BSB113 [UDB104 is replaced 2014] USB141 [UDB141 is replaced 2014] | Management d by BEB112 from Urban Development Law d by LWS012 from Economics d by BSB113 from Building Big d by USB141 from | |
| [UDB200 is replaced 2014] LWS012 [UDB102 is replaced 2014] BSB113 [UDB104 is replaced 2014] USB141 [UDB141 is replaced 2014] Year 2 - Semester 1 | Management d by BEB112 from Urban Development Law d by LWS012 from Economics d by BSB113 from Building Big d by USB141 from Land Use Planning | |



Bachelor of Urban Development (Property Economics)

| [UDB241 is replaced 2015] | d by USB243 from |
|---|----------------------------------|
| USB242 | Experience Property |
| [UDB242 is replace 2015] | 1 2 |
| EFB223 | Economics 2 |
| [UDB243 is replaced 2014] | d by EFB223 from |
| Year 2 - Semester 2 | 2 |
| USB246 | Transaction Process |
| [UDB244 is replaced 2014] | |
| USB240 | Market Analysis |
| [UDB245 is replaced 2015] | d by USB240 from |
| USB245 | Property Investment Analysis |
| [UDB246 is replaced 2014] | d by USB245 from |
| USB343 | Boutique Valuations |
| [UDB247 is replace 2015] | d by USB343 from |
| Year 3 - Semester 1 | |
| USB344 | Property Project |
| [UDB301 is replace 2017. USB344 is a | |
| USB341 | Money and Property |
| [UDB341 is replaced 2015] | d by USB341 from |
| Second Major/Minor | r unit |
| Second Major/Minor | r unit |
| Year 3 - Semester 2 | 2 |
| UDB302 | Development Process |
| USB244 | Asset Performance |
| [UDB344 is replaced 2014] | d by USB244 from |
| Second Major/Minor | r unit |
| Second Major/Minor From 2017 | r unit |
| USB244 | Asset Performance |
| Second Major/Minor | |
| Second Major/Minor | |
| Second Major/Minor | |
| Year 4 - Semester 1 | |
| UDB340 | Agency Practice and Marketing |
| USB241 | Money and Wealth |
| [UDB342 is replaced 2014] | d by USB241 from |
| Second Major/Minor unit | |
| Second Major/Minor | r unit |
| From 2017 | |
| UDB340 | Agency Practice |

| and Marketing | | |
|--|--|--|
| Money and Wealth | | |
| Property Development | | |
| Second Major/Minor unit | | |
| Year 4 - Semester 2 | | |
| Work Integrated Learning 1 | | |
| Management | | |
| [UDB202 is replaced by BSB115 from 2016] | | |
| Second Major/Minor unit | | |
| Second Major/Minor unit | | |
| | | |



Handbook

| Year | 2018 |
|------------------------------|---|
| QUT code | UD40 |
| CRICOS | 056387B |
| Duration (full-time) | 4 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February This course is available to international students who are eligible for a year or more of Advanced Standing (Credit). |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Andrea Blake; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Mr Jason Gray |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA) of English and one of the following: Maths A, Maths B or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Update

As of 2014, this course will only be available for UD40 continuing students. New students should refer to <u>UD01</u> <u>Bachelor of Urban Development</u> (Honours)(Quantity Surveying and Cost <u>Engineering)</u>

For further assistance, please contact sef.enquiry@qut.edu.au

Overview

The course prepares students to work as quantity surveyors or building economists. The course covers building management, cost planning and control, building development techniques, building research, computer software application, measurement of construction, and legal issues. Applicants will be initially enrolled in the Bachelor of Urban Development (Construction Management) but will be directed to take suitable units to graduate with a Quantity Surveying primary major.

Special Course Requirements

You are required to gain a minimum of 80 days of approved employment in the final year of the course.

Professional Recognition

This course is fully accredited by the Australian Institute of Quantity Surveyors, The Royal Institution of Chartered Surveyors (Honours version only), and the Board of Quantity Surveyors Malaysia (with Property Economics second major).

Second Majors and Minors

You will have the opportunity to undertake a second major (8 units) or 2 minors (4 units each) to enhance and broaden your knowledge in a related field or area of interest.

Please refer to <u>your course rules</u> before making your selection.

QUANTITY SURVEYING Second Major and Minor Options

Second Major:

Choose one second major from the following options:

Property Economics Development Property Economics Investment Property Economics Valuation Urban and Regional Planning Architectural Studies

OR

Minors:

Two minors from <u>anywhere in QUT</u>. Remember if you take two Minors, one Minor must be from outside the UD40 course.

Domestic Course structure Work Integrated Learning unit

Students are required to gain a minimum of 80 days of approved employment in the final year of the course.

Your course

Year 1

Complete a common first year with construction management students. You start your studies with foundation units including residential construction and engineering, basic professional learning (including an introduction to research writing), sustainability, land stewardship, urban development economics and building measurement.

Year 2

Apply your construction body of knowledge introduced in first year, and begin to develop the range of graduate capabilities through an introduction to more complex construction techniques, methodologies and management issues



Bachelor of Urban Development (Quantity Surveying)

relating to your degree in quantity surveying. Your analytical and technical skills continue to be honed through commercial construction and the environment. The law and business skills you gain in the second year will also help further develop lifelong learning skills.

Year 3

Increase your knowledge and skills in construction and quantity surveying. You are introduced to in-depth knowledge of the economic, managerial, legal and technical aspects of construction activity, such as high-rise construction, cost planning and control. Undertake second majors/minors to extend construction and quantity surveying knowledge. These allow you to broaden your education by undertaking units from other faculties within the University, subject to accreditation requirements.

Year 4

In your final year you complete your selected second major/minors, involving a major project which brings together all your previously mastered skills, and advances your communication skills in dissertation writing and seminar presentation. You also complete work integrated learning in the quantity surveying discipline, ensuring you are workforce ready.

Second major and minors

You will have the opportunity to undertake a second major (8 units) or 2 minors (4 units each) to enhance and broaden your knowledge in a related field or area of interest.

Please refer to <u>your course rules</u> before making your selection.

Quantity surveying second major and minor options

Second Major:

Choose one second major from the following options:

- Property Economics Development
- Property Economics Investment
- Property Economics Valuation
- Urban and Regional Planning
- Architectural Studies

OR

Minors:

Choose two minors from the following options. Remember, if you take two Minors, one Minor must be from outside your course:

- Property Economics Development
- Property Economics Investment

- Property Economics Valuation
- Urban and Regional Planning
- Architectural Studies
- Work Integrated Learning Minor
 Sustainability Minor
- Sustainability MinorInternational Minor
- Indigenous Studies Minor
- Research Minor
- Project Collaboration Minor
- Collaborative Digital Design Minor
- e en av er an r e '2 ignan '2 e e ign

A minor from <u>anywhere in QUT</u>. International Course

structure

Work Integrated Learning unit

Students are required to gain a minimum of 80 days of approved employment in the final year of the course.

Your course Year 1

Complete a common first year with construction management students. You start your studies with foundation units including residential construction and engineering, basic professional learning (including an introduction to research writing), sustainability, land stewardship, urban development economics and building measurement.

Year 2

Apply your construction body of knowledge introduced in first year, and begin to develop the range of graduate capabilities through an introduction to more complex construction techniques, methodologies and management issues relating to your degree in quantity surveying. Your analytical and technical skills continue to be honed through commercial construction and the environment. The law and business skills you gain in the second year will also help further develop lifelong learning skills.

Year 3

Increase your knowledge and skills in construction and quantity surveying. You are introduced to in-depth knowledge of the economic, managerial, legal and technical aspects of construction activity, such as high-rise construction, cost planning and control. Undertake second majors/minors to extend construction and quantity surveying knowledge. These allow you to broaden your education by undertaking units from other faculties within the University, subject to accreditation requirements.

Year 4

In your final year you complete your selected second major/minors, involving a major project which brings together all your previously mastered skills, and advances your communication skills in dissertation writing and seminar presentation. You also complete work integrated learning in the quantity surveying discipline, ensuring you are workforce ready.

Second major and minors

You will have the opportunity to undertake a second major (8 units) or 2 minors (4 units each) to enhance and broaden your knowledge in a related field or area of interest.

Please refer to <u>your course rules</u> before making your selection.

Quantity surveying second major and minor options

Second Major:

Choose one second major from the following options:

- Property Economics Development
- Property Economics Investment
- Property Economics Valuation
- Urban and Regional Planning
 Architectural Studies
- Architectural Studies

OR

Minors:

Choose two minors from the following options. Remember, if you take two Minors, one Minor must be from outside your course:

- Property Economics Development
- Property Economics Investment
- Property Economics Valuation
- Urban and Regional Planning
- Architectural Studies
- Work Integrated Learning Minor
- Sustainability Minor
- International Minor
- Indigenous Studies Minor
- Research Minor
- Project Collaboration Minor
- Collaborative Digital Design Minor

A minor from anywhere in QUT.

Sample Structure Course Updates

A number of changes have been made to Science and Engineering Faculty courses. From 2014, some units in UD40 Bachelor of Urban Development have been recoded, renamed or discontinued. To see how these changes affect you, please consult the unit replacement table below in conjuction with the course structure. Affected Study Plans are being updated to reflect the changes. Please contact the Faculty if you have any concerns.



Bachelor of Urban Development (Quantity Surveying)

UD40 Unit Replacement Table

Semesters

- Year 1 Semester 1
- Year 1- Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
 Year 3 Semester 2
 Year 4 Semester 1
- Year 4 Semester 2

| Code | The | |
|--|---|--|
| Year 1 - Semeste | er 1 | |
| ENB100 | Engineering and Sustainability | |
| OR | | |
| DEB100 | Design and Sustainability | |
| [UDB100 is replaced by ENB100/EGB100 or DEB100 from 2014] | | |
| USB100 | Understanding the Built Environment | |
| [UDB101 is repla 2014] | aced by USB100 from | |
| UXB110 | Residential Construction | |
| [UDB110 is repla 2014] | aced by UXB110 from | |
| UXB112 | Introduction to Structures | |
| [UDB111 is repla 2014] | aced by UXB112 from | |
| Year 1- Semeste | er 2 | |
| BEB112 | Principles of Project Management | |
| [UDB200 is repla 2014] | aced by BEB112 from | |
| BSB113 | Economics | |
| [UDB104 is repla 2014] | aced by BSB113 from | |
| UXB114 | Integrated Construction | |
| [UDB112 is replaced by UXB114 from 2014] | | |
| UXB113 | Measurement for Construction | |
| [UDB113 is replaced by UXB113 from 2014] | | |
| Year 2 - Semester 1 | | |
| UXB210 | Commercial Construction | |
| [UDB210 is replaced by UXB210 from 2015] | | |
| UXB213 | Advanced Measurement for Construction | |
| [UDB212 is repla 2015] | aced by UXB213 from | |

| | Construction | |
|--|--|--|
| UXB214 | Estimating | |
| [UDB213 is replaced by UXB214 from 2015] | | |
| UXB121 | Imagine Quantity Surveying and Cost Engineering | |
| [UDB216 is repla 2015] | aced by UXB121 from | |
| Year 2 - Semest | er 2 | |
| LWS012 | Urban Development Law | |
| [UDB102 is repla 2014] | aced by LWS012 from | |
| UXH314 | Modern Construction Business | |
| [UDB202 is repla 2016] | aced by UXH314 from | |
| UXB211 | Building Services | |
| 2014] | aced by UXB211 from | |
| Second Major/M | | |
| Year 3 - Semest | er 1 | |
| UXH310 | High-rise Construction | |
| [UDB310 is repla 2016] | aced by UXH310 from | |
| UXH311 | Contract Administration | |
| [UDB312 is repla 2016] | aced by UXH311 from | |
| UXB220 | Services and Heavy Engineering Measurement | |
| [UDB315 is repla 2016] | aced by UXB220 from | |
| Second Major/M | inor unit | |
| Year 3 - Semest | er 2 | |
| UXH312 | Construction | |
| [UDB314 is replaced by UXH312 from 2016] | | |
| - | - | |
| - | - | |
| 2016] UXH321 [UDB316 is repla 2016] | aced by UXH312 from Cost Planning and Controls aced by UXH321 from | |
| 2016] UXH321 [UDB316 is repla 2016] Second Major/M | aced by UXH312 from Cost Planning and Controls aced by UXH321 from inor unit | |
| 2016] UXH321 [UDB316 is repla 2016] Second Major/M Second Major/M | aced by UXH312 from Cost Planning and Controls aced by UXH321 from inor unit inor unit | |
| 2016] UXH321 [UDB316 is repla 2016] Second Major/M | aced by UXH312 from Cost Planning and Controls aced by UXH321 from inor unit inor unit | |
| 2016] UXH321 [UDB316 is repla 2016] Second Major/M Second Major/M | aced by UXH312 from Cost Planning and Controls aced by UXH321 from inor unit inor unit | |
| 2016] UXH321 [UDB316 is repla 2016] Second Major/M Second Major/M Year 4 - Semest | aced by UXH312 from Cost Planning and Controls aced by UXH321 from inor unit inor unit er 1 Work Integrated | |
| 2016] UXH321 [UDB316 is repla 2016] Second Major/M Year 4 - Semest SEB701 UXH300 | aced by UXH312 from Cost Planning and Controls aced by UXH321 from inor unit inor unit er 1 Work Integrated Learning 1 Research Methods | |
| 2016] UXH321 [UDB316 is repla 2016] Second Major/M Year 4 - Semest SEB701 UXH300 [UDB301 is repla | aced by UXH312 from Cost Planning and Controls aced by UXH321 from inor unit inor unit er 1 Work Integrated Learning 1 Research Methods Built Environment aced by UXH300 from | |
| 2016] UXH321 [UDB316 is repla 2016] Second Major/M Second Major/M Year 4 - Semest SEB701 UXH300 [UDB301 is repla 2017] | Cost Planning and Controls aced by UXH312 from inor unit inor unit er 1 Work Integrated Learning 1 Research Methods Built Environment aced by UXH300 from inor unit | |
| 2016] UXH321 [UDB316 is repla 2016] Second Major/M Second Major/M Year 4 - Semest SEB701 UXH300 [UDB301 is repla 2017] Second Major/M | Cost Planning and Controls aced by UXH312 from inor unit inor unit er 1 Work Integrated Learning 1 Research Methods Built Environment aced by UXH300 from inor unit | |

| | Built Environment | |
|-------------------------|--|--|
| USB300 | Property Development | |
| Second Major/Minor unit | | |
| Second Major/Minor unit | | |
| Year 4 - Semester 2 | | |
| BEB801 | Project 1 | |
| UDB302 | Development Process | |
| Second Major/Minor unit | | |
| Second Major/Minor unit | | |
| From 2017 | | |
| BEB801 | Project 1 | |
| UXB301 | Work Integrated Learning Built Environment | |
| Second Major/Minor unit | | |
| Second Major/Minor unit | | |



Bachelor of Urban Development (Urban and Regional Planning)

Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | UD40 |
| CRICOS | 056387B |
| Duration (full-time) | 4 years |
| OP | 8 |
| Rank | 85 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Dom. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Andrea Blake; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Severine Mayere |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Update

As of 2014, this course will only be available for UD40 continuing students. New students should refer to <u>UD01</u> <u>Bachelor of Urban Development</u> (Honours)(Urban and Regional Planning)

For further assistance, please contact sef.enquiry@qut.edu.au

Professional Recognition

This course has received accreditation from the Planning Institute of Australia.

Overview

This course aims to educate students to become innovative leaders in professional planning, with the capacity and will to create a better world. Graduates will apply perceptive sensibilities and skills to create sustainable natural and human environments. The QUT course emphasises creative design and inclusive community planning. You will have the opportunity to work on live projects with local councils and community groups.

Second Major and Minors

You will have the opportunity to undertake two minors (four units each) to broaden your appreciation of fields related to urban and regional planning. One of these is the Applications Minor, that fulfils important Planning Institute of Australia accreditation requirements. The other minor you are able to choose for yourself; for example: landscape architecture, urban design, surveying, property economics, law or business management. Students wishing to undertake a second major rather than the accredited course model are advised to contact the Study Area Coordinator.

Please refer to <u>your course rules</u> before making your selection.

URBAN AND REGIONAL PLANNING Minor Options

Choose two minors from the following options. Remember, one Minor must be from outside the UD40 course:

Urban and Regional Planning Applications Minor (accreditation requirement)

Landscape Architecture Spatial Science Architectural Studies Property Economics Development Property Economics Investment Property Economics Valuation Sustainability Minor International Minor Indigenous Studies Minor Research Minor Project Collaboration Minor Collaborative Digital Design Minor A minor from anywhere in QUT

Domestic Course structure Your course

Year 1

Your first year as a planning student will give you a strong foundation in design skills, experience in working in teams on planning projects, and an understanding of the importance of the social, economic and environmental contexts of planning activity.

Year 2

In your second year as a planning student, you will develop your practical skills through working on site-related projects and development assessment. The second year of the degree also explores the philosophical and theoretical basis of planning.

Year 3

In the third year of your degree, you will focus on the application of design skills on a broader scale through urban design principles. You will also be prepared for the public role of planners through negotiation and conflict resolution, and investigate the importance of environmental planning.

Bachelor of Urban Development (Urban and Regional Planning)

Year 4

In the final year of your degree, you will integrate the skills and capacities developed throughout the course through a major research project, a challenging exploration of planning theory and ethics, and real-world planning projects that move from the community through to the regional level.

Second major and minors

You will have the opportunity to undertake a second major (8 units) or 2 minors (4 units each) to enhance and broaden your knowledge in a related field or area of interest.

Please refer to <u>your course rules</u> before making your selection.

Urban and regional planning second major and minor options

Second Major:

Choose one second major from the following options:

- Architectural Studies
- Landscape Architecture
- Spatial Science
- Property Economics Development
- Property Economics Investment
- Property Economics Valuation
- Construction Management
- Construction Management Residential Construction

OR

Minors:

Choose two minors from the following options. Remember, if you take two Minors, one Minor must be from outside your course:

- Urban and Regional Planning Applications Minor (accreditation requirement)
- Landscape Architecture
- Spatial Science
- Architectural Studies
- Property Economics Development
- Property Economics Investment
- Property Economics Valuation
- Sustainability Minor
- International Minor
- Indigenous Studies Minor
- Research Minor
- Project Collaboration Minor
- Collaborative Digital Design Minor

A minor from anywhere in QUT.

International Course structure

Your course Year 1

Your first year as a planning student will give you a strong foundation in design skills, experience in working in teams on planning projects, and an understanding of the importance of the social, economic and environmental contexts of planning activity.

Year 2

In your second year as a planning student, you will develop your practical skills through working on site-related projects and development assessment. The second year of the degree also explores the philosophical and theoretical basis of planning.

Year 3

In the third year of your degree, you will focus on the application of design skills on a broader scale through urban design principles. You will also be prepared for the public role of planners through negotiation and conflict resolution, and investigate the importance of environmental planning.

Year 4

In the final year of your degree, you will integrate the skills and capacities developed throughout the course through a major research project, a challenging exploration of planning theory and ethics, and real-world planning projects that move from the community through to the regional level.

Second major and minors

You will have the opportunity to undertake a second major (8 units) or 2 minors (4 units each) to enhance and broaden your knowledge in a related field or area of interest.

Please refer to <u>your course rules</u> before making your selection.

Urban and regional planning second major and minor options

Second Major:

Choose one second major from the following options:

- Architectural Studies
- Landscape Architecture
- Spatial Science
- Property Economics Development
- Property Economics Investment
- Property Economics Valuation
- Construction Management
- Construction Management Residential Construction

Minors:

Choose two minors from the following options. Remember, if you take two Minors, one Minor must be from outside your course:

- Urban and Regional Planning Applications Minor (accreditation requirement)
- Landscape Architecture
- Spatial Science
- Architectural Studies
- Property Economics Development
- Property Economics Investment
- Property Economics Valuation
- Sustainability Minor
- International Minor
- Indigenous Studies Minor
- Research Minor
- Project Collaboration Minor
- Collaborative Digital Design Minor

A minor from anywhere in QUT.

Sample Structure Course Updates

A number of changes have been made to Science and Engineering Faculty courses. From 2014, some units in UD40 Bachelor of Urban Development have been recoded, renamed or discontinued. To see how these changes affect you, please consult the unit replacement table below in conjuction with the course structure. Affected Study Plans are being updated to reflect the changes. Please contact the Faculty if you have any concerns.

UD40 Unit Replacement Table

Semesters

- Year 1 Semester 1
- Year 1- Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2

| Code | Title | |
|--|-------------------------------------|--|
| Year 1 - Semeste | Year 1 - Semester 1 | |
| ENB100 | Engineering and Sustainability | |
| OR | | |
| DEB100 | Design and Sustainability | |
| [UDB100 is replaced by ENB100/EGB100 or DEB100 from 2014] | | |
| USB100 | Understanding the Built Environment | |
| [UDB101 is replaced by USB100 from 2014] | | |
| UXB131 | Imagine Planning and | |



Bachelor of Urban Development (Urban and Regional Planning)

| | Design | |
|--|--|--|
| [UDB161 is replace 2014] | ced by UXB131 from | |
| UXB130 | History of the Built Environment | |
| [UXB130 is replace 2014] | ced by UXB130 from | |
| Year 1- Semester | · 2 | |
| BSB113 | Economics | |
| | ced by BSB113 from | |
| UXB134 | Land Use Planning | |
| [UDB163 is replace 2014] | ced by UXB134 from | |
| UXB133 | Urban Studies | |
| [UDB164 is replace 2014] | ced by UXB133 from | |
| BEB112 | Principles of Project Management | |
| 2014; then either | | |
| BEB112 (S2) the | = | |
| Year 2 - Semeste | | |
| UXB230 | Site Planning | |
| 2015] | ced by UXB230 from | |
| UXB231 | Planning Processes | |
| [UDB266 is replace 2015] | ced by UXB231 from | |
| EVB211 | Geographic Information Systems and Science | |
| [UDB281 is replace 2016] | ced by EVB211 from | |
| Minor unit | | |
| Year 2 - Semeste | er 2 | |
| LWS012 | Urban Development Law | |
| [UDB102 is replace 2014] | ced by LWS012 from | |
| BSB115 | Management | |
| [UDB202 is replace 2016] | ced by BSB115 from | |
| UXB233 | Planning Law | |
| [UDB267 is replaced by UXB233 from 2015] | | |
| Minor unit | | |
| Year 3 - Semeste | | |
| UXB330 | Urban Design | |
| [UDB368 is replace 2016] | ced by UXB330 from | |
| UXB232 | Negotiation and Conflict Resolution | |
| [UDB369 is replace 2016] | ced by UXB232 from | |
| EVB210 | Geospatial Mapping | |
| [UDB381 is replace 2017] | ced by EVB210 from | |
| | | |

| Minor unit | | |
|---|--|--|
| From 2017 | | |
| UXB330 | Urban Design | |
| UXB232 | Negotiation and Conflict Resolution | |
| EVB210 | Geospatial Mapping | |
| USB300 | Property Development | |
| Year 3 - Semeste | | |
| UXB332 | Transport Planning | |
| SEM-2 2016] | ced by UXB332 from | |
| UDB302 | Development Process | |
| UXH331 | Environmental Analysis and Planning | |
| [UDB370 is replated 2016] | ced by UXH331 from | |
| Minor unit | | |
| From 2017 | | |
| UXB332 | Transport Planning | |
| UXH331 | Environmental Analysis and Planning | |
| UXB301 | Work Integrated Learning Built Environment | |
| MInor Unit | | |
| Year 4 - Semeste | er 1 | |
| SEB701 | Work Integrated Learning 1 | |
| UXH300 | Research Methods Built Environment | |
| [UDB301 is replace 2017] | ced by UXH300 from | |
| UXH431 | Urban Planning Practice | |
| [UDB471 is replat 2017] | ced by UXH431 from | |
| UXH430 | Planning Theory and Ethics | |
| [UDB473 is replaced by UXH430 from 2017] | | |
| From 2017 | | |
| UXH300 | Research Methods Built Environment | |
| UXH431 | Urban Planning Practice | |
| UXH430 | Planning Theory and Ethics | |
| Minor Unit | | |
| Year 4 - Semester 2 | | |
| BEB802 | Project 2 | |
| UXH432 | Community Planning | |
| [UDB472 is replace 2017] | ced by UXH432 from | |
| UDB474 | Regional Planning Practice | |
| UXH433 | Regional Planning | |
| [UDB475 is replaced | ced by UXH433 from | |
| | | |

2017]



Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | ID03 |
| CRICOS | 059227E |
| Duration (full-time) | 4 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point, Kelvin Grove |
| Domestic fee (indicative) | 2018: CSP \$8,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,400 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Sophie McIntyre (Creative Industries); SEF Enquiries (Information Technology); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Wayne Kelly (Computer Science), Dr Erwin Fielt (Information Systems) +61 7 3138 2000 askqut@qut.edu.au |

Domestic Assumed

knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
 - Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure Your course

In order to complete this course, you must complete a total of 384 credit points comprising 192 credit points from the Bachelor of Creative Industries and 192 credit points from the Bachelor of Information Technology. You will undertake the two components of the double degree concurrently.

Creative Industries component

The core of the program centres on Creative Enterprise studios that offer authentic, problem-based activities, coupled with work integrated learning, skills in entrepreneurship and commercial links that engage in creative start-ups. Early in your degree, you choose two introductory units to experience your preferred majors. Using this experience, you then decide upon a creative industries major.

You will complete:

- core units 72 credit points
- · creative industries introductory units

- 24 credit points

 a creative industries major - 96 credit points from one of the specified majors including: Creative and Professional Writing; Media and Communication; Drama and Performance; Entertainment; Fashion Communication; Interactive and Visual Design; Music and Sound; and Screen Content Production.

Information Technology

component

You will complete:

- six core units (72 credit points: 48cp + 24cp core options)
- 10 major core units (120 credit points).

Study overseas

<u>Study overseas</u> while earning credit towards your QUT creative industries degree with one of our worldwide exchange partners.

Overseas study can be for one or two semesters (or during the semester break) and the units you take can be in a creative or non-creative discipline area, depending on how they match with your QUT course.

International Course structure

Your course

In order to complete this course, you must complete a total of 384 credit points comprising 192 credit points from the Bachelor of Creative Industries and 192 credit points from the Bachelor of Information Technology. You will undertake the two components of the double degree concurrently.

Creative Industries component

The core of the program centres on Creative Enterprise studios that offer authentic, problem-based activities, coupled with work integrated learning, skills in entrepreneurship and commercial links that engage in creative start-ups. Early in your degree, you choose two introductory units to experience your preferred majors. Using this experience, you then decide upon a creative industries major.

You will complete:

- core units 72 credit points
- creative industries introductory units - 24 credit points
- a creative industries major 96 credit points from one of the specified majors including: Creative

Bachelor of Creative Industries/Bachelor of Information Technology

and Professional Writing; Media and Communication; Drama and Performance; Entertainment; Fashion Communication; Interactive and Visual Design; Music and Sound; and Screen Content Production.

Information Technology component

You will complete:

- six core units (72 credit points: 48cp + 24cp core options)
- 10 major core units (120 credit points).

Study overseas

<u>Study overseas</u> while earning credit towards your QUT creative industries degree with one of our worldwide exchange partners.

Overseas study can be for one or two semesters (or during the semester break) and the units you take can be in a creative or non-creative discipline area, depending on how they match with your QUT course.

Sample Structure

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
 Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2

Code

Year 1, Semester 1 IT Core Unit

IT Core Unit

TT Core U

KKB180 Creative Futures A unit from the Creative Industries

Title

Introductory Unit Options List Year 1, Semester 2

IT Core Unit

| IT | Core | Unit |
|----|------|------|

KKB185

IND 100

A unit from the Creative Industries Introductory Unit Options List

Note: Students considering studying overseas in Year 2 Semester 2 must apply by 1 November.

Studio 1

Creative Enterprise

Year 2, Semester 1

- IT Core Unit Option
- IT Core Unit Option

Creative Industries Major: First Unit

Creative Industries Major: Second Unit Year 2, Semester 2

| IT Major Unit | | |
|---|---|--|
| IT Major Unit | | |
| Creative Industrie | es Major: Third Unit | |
| Creative Industrie | es Major: Fourth Unit | |
| Year 3, Semester | ·1 | |
| IT Major Unit | | |
| IT Major Unit | | |
| Creative Industrie | es Major: Fifth Unit | |
| Creative Industries Major: Sixth Unit | | |
| Year 3, Semester | 2 | |
| IT Major Unit | | |
| IT Major Unit | | |
| KKB285 | Creative Enterprise Studio 2 | |
| Creative Industrie | es Major: Seventh Unit | |
| Year 4, Semester | ·1 | |
| IT Major Unit | | |
| IT Major Unit | | |
| Creative Industries Major: Eighth Unit | | |
| A unit from the Creative Industries WIL Unit Options List: | | |
| KKB341 | Work Integrated Learning 1 | |
| KKB380 | Creative Enterprise and Entrepreneurship | |
| Year 4, Semester 2 | | |
| | | |

IT Major Unit

| • | |
|---------------|---------------------------------|
| IT Major Unit | |
| KKB385 | Creative Enterprise Studio 3 |

Semesters

| | • | Year | 1, | Semester | 2 |
|--|---|------|----|----------|---|
|--|---|------|----|----------|---|

- Year 2, Semester 1
- Year 2, Semester 2
 Year 3, Semester 1
- Year 3, Semester 1
- Year 4, Semester 1
- Year 4, Semester 2

apply by 1 June.

Year 5, Semester 1

| Code | Title |
|---|---------------------------------------|
| Year 1, Semester | 2 |
| IT Core Unit | |
| IT Core Unit | |
| KKB185 Creative Enterprise Studio 1 | |
| A unit from the Creative Industries Introductory Unit Options List | |
| Year 2, Semester 1 | |
| , | |
| IT Core Unit | |
| | |
| IT Core Unit | Creative Futures |
| IT Core Unit IT Core Unit | Creative Futures eative Industries |

| Year 2, Semester | 2 |
|--|---|
| IT Core Unit Optic | n |
| IT Core Unit Optic | n |
| Creative Industrie | s Major: First Unit |
| Creative Industrie | s Major: Second Unit |
| Year 3, Semester | 1 |
| IT Major Unit | |
| IT Major Unit | |
| Creative Industrie | s Major: Third Unit |
| Creative Industrie | s Major: Fourth Unit |
| Year 3, Semester | 2 |
| IT Major Unit | |
| IT Major Unit | |
| KKB285 | Creative Enterprise Studio 2 |
| Creative Industrie | s Major: Fifth Unit |
| Year 4, Semester | 1 |
| T Major Unit | |
| T Major Unit | |
| Creative Industrie | s Major: Sixth Unit |
| Creative Industrie | s Major: Seventh Unit |
| Year 4, Semester | 2 |
| IT Major Unit | |
| IT Major Unit | |
| KKB385 | Creative Enterprise Studio 3 |
| Year 5, Semester | 1 |
| IT Major Unit | |
| IT Major Unit | |
| | s Major: Eighth Unit |
| A unit from the Cr Unit Options List: | eative Industries WIL |
| KKB341 | Work Integrated Learning 1 |
| KKB380 | Creative Enterprise and Entrepreneurship |
| | |

Semesters

- <u>Semester 1 (February)</u> commencements
- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Semester 2 (July) commencements
- Year 1, Semester 2
 Voor 2, Semester 4
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
 Year 5, Semester 1

Code Title Semester 1 (February) commencements



Bachelor of Creative Industries/Bachelor of Information Technology

| Dachelor of C | |
|---|---|
| Year 1, Semester | 1 |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| Year 1, Semester | 2 |
| IFB104 | Building IT Systems |
| IFB130 | Database Management |
| Year 2, Semester | 1 |
| IFB103 | Designing for IT |
| IT Core Unit Optic | n |
| Year 2, Semester | 2 |
| CAB201 | Programming Principles |
| CAB202 | Microprocessors and Digital Systems |
| Year 3, Semester | 1 |
| CAB203 | Discrete Structures |
| CAB302 | Software Development |
| Year 3, Semester | 2 |
| CAB303 | Networks |
| IFB299 | IT Project Design and Development |
| Year 4, Semester | 1 |
| CAB301 | Algorithms and Complexity |
| IFB398 | Capstone Project |
| 11 2000 | (Phase 1) |
| Year 4, Semester | |
| | |
| Year 4, Semester | 2 Capstone Project |
| Year 4, Semester IFB399 | 2 Capstone Project |
| Year 4, Semester IFB399 Select one of: | 2 Capstone Project (Phase 2) High Performance and Parallel |
| Year 4, Semester IFB399 Select one of: CAB401 | 2 Capstone Project (Phase 2) High Performance and Parallel Computing Programming |
| Year 4, Semester IFB399 Select one of: CAB401 CAB402 | 2 Capstone Project (Phase 2) High Performance and Parallel Computing Programming Paradigms Systems Programming |
| Year 4, Semester IFB399 Select one of: CAB401 CAB402 CAB403 | 2 Capstone Project (Phase 2) High Performance and Parallel Computing Programming Paradigms Systems Programming commencements |
| Year 4, Semester IFB399 Select one of: CAB401 CAB402 CAB403 Semester 2 (July) | 2 Capstone Project (Phase 2) High Performance and Parallel Computing Programming Paradigms Systems Programming commencements |
| Year 4, Semester IFB399 Select one of: CAB401 CAB402 CAB403 Semester 2 (July) Year 1, Semester | 2 Capstone Project (Phase 2) High Performance and Parallel Computing Programming Paradigms Systems Programming commencements 2 Impact of IT Computer Technology |
| Year 4, Semester IFB399 Select one of: CAB401 CAB402 CAB403 Semester 2 (July) Year 1, Semester IFB101 IFB102 | 2 Capstone Project (Phase 2) High Performance and Parallel Computing Programming Paradigms Systems Programming commencements 2 Impact of IT Computer Technology Fundamentals |
| Year 4, Semester IFB399 Select one of: CAB401 CAB402 CAB403 Semester 2 (July) Year 1, Semester IFB101 | 2 Capstone Project (Phase 2) High Performance and Parallel Computing Programming Paradigms Systems Programming commencements 2 Impact of IT Computer Technology Fundamentals |
| Year 4, Semester IFB399 Select one of: CAB401 CAB402 CAB403 Semester 2 (July) Year 1, Semester IFB101 IFB102 Year 2, Semester IFB103 | 2 Capstone Project (Phase 2) High Performance and Parallel Computing Programming Paradigms Systems Programming commencements 2 Impact of IT Computer Technology Fundamentals |
| Year 4, Semester IFB399 Select one of: CAB401 CAB402 CAB403 Semester 2 (July) Year 1, Semester IFB101 IFB102 Year 2, Semester IFB103 IFB104 | 2 Capstone Project (Phase 2) High Performance and Parallel Computing Programming Paradigms Systems Programming commencements 2 Impact of IT Computer Technology Fundamentals 1 Designing for IT Building IT Systems |
| Year 4, Semester IFB399 Select one of: CAB401 CAB402 CAB403 Semester 2 (July) Year 1, Semester IFB101 IFB102 Year 2, Semester IFB104 Year 2, Semester | 2 Capstone Project (Phase 2) High Performance and Parallel Computing Programming Paradigms Systems Programming commencements 2 Impact of IT Computer Technology Fundamentals 1 Designing for IT Building IT Systems 2 |
| Year 4, Semester IFB399 Select one of: CAB401 CAB402 CAB403 Semester 2 (July) Year 1, Semester IFB101 IFB102 Year 2, Semester IFB103 IFB104 | 2 Capstone Project (Phase 2) High Performance and Parallel Computing Programming Paradigms Systems Programming commencements 2 Impact of IT Computer Technology Fundamentals 1 Designing for IT Building IT Systems 2 Programming Principles |
| Year 4, Semester IFB399 Select one of: CAB401 CAB402 CAB403 Semester 2 (July) Year 1, Semester IFB101 IFB102 Year 2, Semester IFB103 IFB104 Year 2, Semester CAB201 IFB130 | 2 Capstone Project (Phase 2) High Performance and Parallel Computing Programming Paradigms Systems Programming commencements 2 Impact of IT Computer Technology Fundamentals 1 Designing for IT Building IT Systems 2 Programming Principles Database Management |
| Year 4, Semester IFB399 Select one of: CAB401 CAB402 CAB403 Semester 2 (July) Year 1, Semester IFB101 IFB102 Year 2, Semester IFB103 IFB104 Year 2, Semester CAB201 | 2 Capstone Project (Phase 2) High Performance and Parallel Computing Programming Paradigms Systems Programming commencements 2 Impact of IT Computer Technology Fundamentals 1 Designing for IT Building IT Systems 2 Programming Principles Database Management |

| ion Technology | | |
|---|--|--|
| Digital Systems | | |
| Algorithms and Complexity | | |
| 2 | | |
| Networks | | |
| IT Project Design and Development | | |
| 1 | | |
| Discrete Structures | | |
| Software Development | | |
| 2 | | |
| Capstone Project (Phase 1) | | |
| | | |
| High Performance and Parallel Computing | | |
| Systems Programming | | |
| ption | | |
| 1 | | |
| Capstone Project (Phase 2) | | |
| | | |
| High Performance and Parallel Computing | | |
| Programming Paradigms | | |
| ption | | |
| (Select IT Core Unit Option here, if not selected previously.) | | |
| Semesters • Semester 1 (February) commencements • Year 1, Semester 1 • Year 1, Semester 2 • Year 2, Semester 2 • Year 3, Semester 2 • Year 3, Semester 1 • Year 4, Semester 2 • Year 4, Semester 2 • Year 1, Semester 2 • Year 2, Semester 2 • Year 3, Semester 2 • Year 3, Semester 1 • Year 3, Semester 1 • Year 3, Semester 1 • Year 3, Semester 1 • Year 4, Semester 1 | | |
| | | |

| • | Year | r 5. | Semester | 1 |
|---|------|------|----------|---|
|---|------|------|----------|---|

| Code | Title | |
|-------------------------------------|--|--|
| Semester 1 (February) commencements | | |
| Year 1, Semester 1 | | |
| IFB101 | Impact of IT | |
| IFB102 | Computer Technology Fundamentals | |

| Year 1, Semester 2 | |
|---------------------|--|
| IFB104 | Building IT Systems |
| | Database |
| IFB130 | Management |
| Year 2, Semester 1 | |
| IFB103 | Designing for IT |
| IT Core Unit Option | |
| Year 2, Semester 2 | Modelling |
| IAB201 | Information Systems |
| IAB202 | Business of Information Technology |
| Year 3, Semester 1 | |
| IAB203 | Business Process Modelling |
| IAB204 | Business Analysis |
| Year 3, Semester 2 | |
| IAB205 | Corporate Systems |
| IFB299 | IT Project Design and Development |
| Year 4, Semester 1 | |
| IFB398 | Capstone Project (Phase 1) |
| Select one of: | |
| IAB302 | Information Systems Consulting |
| IAB303 | Business Intelligence |
| IAB304 | Project Management |
| Year 4, Semester 2 | - |
| IAB301 | Enterprise Architecture |
| IFB399 | Capstone Project (Phase 2) |
| Semester 2 (July) c | |
| Year 1, Semester 2 | |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| Year 2, Semester 1 | |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| Year 2, Semester 2 | |
| IFB130 | Database Management |
| IAB201 | Modelling Information Systems |
| Year 3, Semester 1 | |
| IAB202 | Business of Information Technology |
| IT Core Unit Option | 0. |

QUT

Bachelor of Creative Industries/Bachelor of Information Technology

| Year 3, Semester 2 | | |
|--------------------|--------------------------------------|--|
| IAB204 | Business Analysis | |
| IAB205 | Corporate Systems | |
| Year 4, Semester 1 | | |
| IAB203 | Business Process Modelling | |
| IFB299 | IT Project Design and Development | |
| Year 4, Semester 2 | | |
| IAB301 | Enterprise Architecture | |
| IFB398 | Capstone Project (Phase 1) | |
| Year 5, Semester 1 | | |
| IFB399 | Capstone Project (Phase 2) | |
| Select ONE of: | | |
| IAB302 | Information Systems Consulting | |
| IAB303 | Business Intelligence | |
| IAB304 | Project Management | |



Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | IF21 |
| CRICOS | 020329J |
| Duration (full-time) | 5 years |
| OP | 7 |
| Rank | 87 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 480 |
| Credit points full-time sem. | 48 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Jacob Coetzee (Electrical); Timothy Moroney (Mathematics) |

Domestic Entry requirements

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator.

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (English (4, SA) and Maths B (4, SA)). Recommended study: Chemistry, Maths C and Physics.

International Entry requirements

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator.

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies (English (4, SA) and Maths B (4, SA)). Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Professional Recognition

This course meets the requirements for membership of Engineers Australia (EA). EA is a signatory to the Washington Accord, which permits graduates from accredited member courses to work in various countries across the world. The course also meets the coursework requirements for accredited graduate membership of the Mathematical Society of Australia, the Statistical Society of Australia, and the Australian Society of Operations Research.

Financial Support

You should consider applying for an industry-sponsored mathematics bursary or an engineering scholarship to help you financially throughout your studies. For further information visit <u>scholarships</u>.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure Course Design

Students are required to complete 480 credit points comprised of 288 credit points from the Bachelor of Engineering (Electrical) program and 192 credit points from the Bachelor of Mathematics program.

Engineering component:

- 8 Engineering Core units (96 credit points)
- 16 Major Core units (192 credit points)

Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator.

Mathematics component:

- 6 Core units (72 credit points), which are further divided into 4 Mathematics Core units (48 credit points), and 2 Core Option units (24 credit points) selected from an approved list.
- 10 Major Core units (120 credit points)

Mathematics Core Units These units give you the grounding in mathematical theory and practice upon which your major units will build, and also



Bachelor of Engineering (Electrical)/Bachelor of Mathematics

provide an introductory taste of each of the three majors: applied and computational mathematics; decision science; and statistical science.

Core Option Units

You may choose from a wide variety of introductory units from other disciplines offered at QUT, or you may choose additional mathematics units. The additional mathematics units include a unit specially designed to assist students without a background of successful study in Mathematics C at high school; an alternative unit aimed at high achieving students that explores some interesting and unusual aspects of mathematics in some detail; and a unit introducing the field of computational and simulation science which combines mathematics, science and computing to simulate realworld problems.

International Course structure Course Design

Students are required to complete 480 credit points comprised of 288 credit points from the Bachelor of Engineering (Electrical) program and 192 credit points from the Bachelor of Mathematics program.

Engineering component:

- 8 Engineering Core units (96 credit points)
- 16 Major Core units (192 credit points)

Work Integrated Learning unit

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator.

Mathematics component:

- 6 Core units (72 credit points), which are further divided into 4 Mathematics Core units (48 credit points), and 2 Core Option units (24 credit points) selected from an approved list.
- 10 Major Core units (120 credit points)

Mathematics Core Units

These units give you the grounding in mathematical theory and practice upon which your major units will build, and also provide an introductory taste of each of the three majors: applied and computational mathematics; decision science; and statistical science.

Core Option Units You may choose from a wide variety of introductory units from other disciplines offered at QUT, or you may choose additional mathematics units. The additional mathematics units include a unit specially designed to assist students without a background of successful study in Mathematics C at high school; an alternative unit aimed at high achieving students that explores some interesting and unusual aspects of mathematics in some detail; and a unit introducing the field of computational and simulation science which combines mathematics, science and computing to simulate realworld problems.



QUT

Handbook

| Year | 2018 |
|------------------------------|--|
| QUT code | IT07 |
| CRICOS | 063028M |
| Duration (full-time) | 4 years |
| OP | 12 |
| Rank | 75 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Mr Mike Roggenkamp (Information Technology Major), Dr Taizan Chan (Corporate Systems Management Major); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA) of English and one of the following: Maths A, Maths B or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International Testing System) | English Language |
|---|------------------|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Update

This course is currently under review. The course structure is being redeveloped and is subject to university approval. For course updates please visit www.qut.edu.au/coursechanges

Career Outcomes

The professional skills gained from this double degree are applicable across all business domains. As a graduate, you can expect to work in roles such as a business analyst or consultant, information and communication technologies project manager or information technology infrastructure manager, information analyst, business process manager, information manager, database manager, data communications specialist, systems analyst or programmer.

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Pathways to Futher Studies

In 2001, the Faculty introduced an accelerated Honours program to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year.

The program allowed selected high achieving students the opportunity to undertake one postgraduate unit in the final semester of their a BIT degree (or double degree) which would be counted both for completion of the degree and towards the Honours program. The program also provided students with the opportunity to commence their Honours studies over the Summer Semester.

An alternative to the Honours program is the Master of Information Technology (Research). Students who complete a BIT degree (or double degree) with a grade point average equal to, or greater than 5 (7 point scale) and who have decided against enrolling in an Honours program, could undertake this course. In addition, students may wish to enrol in the redesigned postgraduate coursework Masters which has ten specialisations allowing students to either extend their area of interest or specialise in other areas at the Masters level.

Study Areas

IT07 will not have nominated majors and minors and consequently there will not be a Study Area A shown on a graduate's parchment. Instead, IT07 will have specialisations. The specialisation areas that will be available for students will include:

- Business Process Management
- Data Warehousing
- Digital Societies
- Enterprise Systems
- Information Management
- Network Systems
- Software Engineering
- Web Technologies

Cooperative Education

The Faculty's Cooperative Education Program gives you the opportunity of 10-12 months paid industry placement during your course where you can integrate real experience with what you're learning in your degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNITAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the <u>Cooperative</u> <u>Education Program.</u>

| Year | 2018 |
|-----------------------------------|---|
| QUT code | IX22 |
| CRICOS | 059595C |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 81 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$10,200 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,200 per year full-time (96 credit points) |
| Total credit points | 384 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Director of Studies, QUT Business School |
| Discipline Coordinator | Associate Prof Belinda Luke (Accountancy); Nicolas Pontes (Advertising); Dr Radhika Lahiri (Economics); Dr Mark Doolan (Finance); Dr Ali Muhammad (Human Resource Management); Dr Shane Mathews (International Business); Dr Kavoos Mohannak (Management); Prof Larry Neale (Marketing); and Dr Anne Lane (Public Relations) Business: +61 7 3138 2050; IT: +61 7 3138 8822 Business: bus@qut.edu.au; IT: sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International Testing System) | English Language |
|---|------------------|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

This double degree will give you a broad base of commercial knowledge in business and information technology. Business is highly dependent on information technology infrastructure, so having the expertise in both makes you more attractive to employers looking for multidisciplined staff.

Businesses look for staff who can communicate well from both the business and information technology disciplines, so having the skills and knowledge across both gives you a competitive edge over other graduates. You will have the opportunity to complement your information technology studies in either information systems or computer science with a business major in accountancy, advertising, economics, finance, human resource management, international business, management, marketing or public relations.

Career Outcomes

This double degree will give you the particular skills to acquire a role requiring knowledge in both business and information technology. These include business and systems analyst, systems manager, product manager for an information technology product, team leader for multidisciplinary staff, pre-sales consulting, after-sales support, technical manager or consultant. Future career prospects include chief financial officer, chief information officer and chief technical officer.

Study Areas

IX22 has nominated majors in Information Systems and Computer Science in the Information Technology component of the degreee. There will now be a Study Area A shown on a graduate's parchment.

Professional Recognition

The Bachelor of Business degree may, subject to choice of major, allow graduates to satisfy the academic requirements for membership to a number of professional bodies. Further information is available from the discipline schools.

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Domestic Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Information Technology program and 192 credit points from the Bachelor of Business program.

Business component:

- Eight Business School core units (96 credit points) *
- Eight major core units (96 credit points)

*Accounting major students complete six business core units and 10 accountancy major units to allow them to complete professional requirements.

Information Technology component:

- Six (6) Core IT units (72 credit points 48cp + 24cp core options)
- Ten (10) major core units (120 credit points)

International Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Information Technology program and 192 credit points from the Bachelor of Business program.

Business component:

- Eight Business School core units (96 credit points) *
- Eight major Core units (96 credit points)

*Accounting major students complete six business core units and 10 accountancy major units to allow them to complete professional requirements.

Information Technology component:

• Six (6) core IT units (72 credit points - 48cp + 24cp core options)

Title

• Ten (10) major core units (120 credit points)

Sample Structure **Semesters**

- ٠ Year 1, Semester 1
- Year 1, Semester 2
- . Year 2, Semester 1
- Year 2, Semester 2 .
- . Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 .
- Year 4, Semester 2 •

Code Year 1, Semester 1

Year 3, Semester 1

| IT Core Unit |
|----------------------|
| IT Core Unit |
| Business School Unit |
| Business School Unit |
| Year 1, Semester 2 |
| IT Core Unit |
| IT Core Unit |
| Business School Unit |
| Business School Unit |
| Year 2, Semester 1 |
| IT Core Unit Option |
| IT Core Unit Option |
| Business School Unit |
| Business School Unit |
| Year 2, Semester 2 |
| IT Major Unit |
| IT Major Unit |
| Business School Unit |
| Business School Unit |

| IT Major Unit |
|----------------------|
| IT Major Unit |
| Business School Unit |
| Business School Unit |
| Year 3, Semester 2 |
| IT Major Unit |
| IT Major Unit |
| Business School Unit |
| Business School Unit |
| Year 4, Semester 1 |
| IT Major Unit |
| IT Major Unit |
| Business School Unit |
| Business School Unit |
| Year 4, Semester 2 |
| IT Major Unit |
| IT Major Unit |
| Business School Unit |
| Business School Unit |
| |

Semesters

- Semester 1 (February)
- commencements
- Year 1, Semester 1 Year 1, Semester 2 .
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2 .
- Year 4, Semester 1
- Year 4, Semester 2
- Semester 2 (July) commencements
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1 .
- Year 3, Semester 2
- Year 4, Semester 1 .
- Year 4, Semester 2
- Year 5, Semester 1

| Code | Title |
|--------------------|--|
| Semester 1 (Febru | uary) commencements |
| Year 1, Semester | 1 |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| Year 1, Semester | 2 |
| IFB104 | Building IT Systems |
| IFB130 | Database Management |
| Year 2, Semester | 1 |
| IFB103 | Designing for IT |
| IT Core Unit Optio | n |
| Year 2, Semester | 2 |
| CAB201 | Programming Principles |
| CAB202 | Microprocessors and Digital Systems |

| Year 3, Semester | 1 |
|-------------------|---|
| CAB203 | Discrete Structures |
| CAB302 | Software Development |
| Year 3, Semester | 2 |
| CAB303 | Networks |
| IFB299 | IT Project Design and Development |
| Year 4, Semester | |
| CAB301 | Algorithms and Complexity |
| IFB398 | Capstone Project (Phase 1) |
| Year 4, Semester | |
| IFB399 | Capstone Project (Phase 2) |
| Select one of: | |
| CAB401 | High Performance and Parallel Computing |
| CAB402 | Programming Paradigms |
| CAB403 | Systems Programming |
| Semester 2 (July) | |
| Year 1, Semester | |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| Year 2, Semester | 1 |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| Year 2, Semester | 2 |
| CAB201 | Programming Principles |
| IFB130 | Database Management |
| Year 3, Semester | 1 |
| CAB202 | Microprocessors and Digital Systems |
| CAB301 | Algorithms and Complexity |
| Year 3, Semester | |
| CAB303 | Networks |
| IFB299 | IT Project Design and Development |
| Year 4, Semester | |
| CAB203 | Discrete Structures |
| CAB302 | Software Development |
| Year 4, Semester | |
| IFB398 | Capstone Project (Phase 1) |
| Select ONE of: | |
| CAB401 | High Performance and Parallel |



Bachelor of Business/Bachelor of Information Technology

| | Computing |
|---------------------------------------|---|
| CAB403 | Systems Programming |
| OR IT Core Unit C | ption |
| Year 5, Semester | 1 |
| IFB399 | Capstone Project (Phase 2) |
| Select ONE of: | |
| CAB401 | High Performance and Parallel Computing |
| CAB402 | Programming Paradigms |
| OR IT Core Unit C | ption |
| (Select IT Core Ur selected previous) | nit Option here, if not y.) |

Semesters

| ٠ | Semester 1 (| (February) |
|---|--------------|------------|
| | commencem | onte |

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
 Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Semester 2 (July) commencements Year 1, Semester 2 ٠
- Year 2, Semester 1 Year 2, Semester 2
- ٠
- Year 3, Semester 1 Year 3, Semester 2 ٠
- ٠ Year 4, Semester 1
- Year 4, Semester 2
- Year 5, Semester 1

| Code | Title |
|-------------------------------------|--|
| Semester 1 (February) commencements | |
| Year 1, Semester 1 | |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| Year 1, Semester 2 | |
| IFB104 | Building IT Systems |
| IFB130 | Database Management |
| Year 2, Semester 1 | |
| IFB103 | Designing for IT |
| IT Core Unit Option | |
| Year 2, Semester 2 | |
| IAB201 | Modelling Information Systems |
| IAB202 | Business of Information Technology |
| Year 3, Semester 1 | |
| IAB203 | Business Process Modelling |

| IAB204 | Business Analysis |
|---|--|
| Year 3, Semester 2 | |
| IAB205 | Corporate Systems |
| IFB299 | IT Project Design and Development |
| Year 4, Semester 1 | |
| IFB398 | Capstone Project (Phase 1) |
| Select one of: | |
| IAB302 | Information Systems Consulting |
| IAB303 | Business Intelligence |
| IAB304 | Project Management |
| Year 4, Semester 2 | |
| IAB301 | Enterprise Architecture |
| IFB399 | Capstone Project (Phase 2) |
| Semester 2 (July) c | |
| Year 1, Semester 2 | |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| Year 2, Semester 1 | |
| IFB103 | Designing for IT |
| | |
| IFB104 | Building IT Systems |
| IFB104 Year 2, Semester 2 | ÷ . |
| Year 2, Semester 2 | ÷ . |
| | Database Management |
| Year 2, Semester 2 | Database Management Modelling Information |
| Year 2, Semester 2 IFB130 IAB201 | Database Management Modelling |
| Year 2, Semester 2 IFB130 | Database Management Modelling Information Systems Business of Information |
| Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 | Database Management Modelling Information Systems Business of Information Technology |
| Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option | Database Management Modelling Information Systems Business of Information Technology |
| Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 | Database Management Modelling Information Systems Business of Information Technology |
| Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 | Database Management Modelling Information Systems Business of Information Technology |
| Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 | Database Management Modelling Information Systems Business of Information Technology Business Analysis |
| Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 | Database Management Modelling Information Systems Business of Information Technology Business Analysis |
| Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 | Database Management Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process |
| Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 IAB203 | Database Management Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process Modelling IT Project Design and Development |
| Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 IAB203 IFB299 | Database Management Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process Modelling IT Project Design and Development |
| Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 IAB203 IFB299 Year 4, Semester 2 | Database Management Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process Modelling IT Project Design and Development |
| Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 IAB203 IFB299 Year 4, Semester 2 IAB301 | Database Management Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process Modelling IT Project Design and Development Enterprise Architecture Capstone Project |
| Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 IAB203 IFB299 Year 4, Semester 2 IAB301 IFB398 | Database Management Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process Modelling IT Project Design and Development Enterprise Architecture Capstone Project |

| IAB302 | Information Systems Consulting |
|--------|-----------------------------------|
| IAB303 | Business Intelligence |
| IAB304 | Project Management |



| Year | 2018 | |
|-----------------------------------|---|--|
| QUT code | IX23 | |
| CRICOS | 078352J | |
| Duration (full-time) | 4 years | |
| OP | 9 | |
| Rank | 81 | |
| OP Guarantee | Yes | |
| Campus | Gardens Point | |
| Domestic fee (indicative) | 2018: CSP \$9,900 per year full-time (96 credit points) | |
| International fee (indicative) | 2018: \$33,500 per year full-time (96 credit points) | |
| Total credit points | 384 | |
| Start months | July, February | |
| Int. Start Months | July, February | |
| Deferment | You can defer your offer and postpone the start of your course for one year. | |
| Course Coordinator | Dr Graham Johnson (Science); Director of Studies, QUT Business School | |
| Discipline Coordinator | Associate Prof Belinda Luke (Accountancy); Nicolas Pontes (Advertising); Dr Radhika Lahiri (Economics); Dr Mark Doolan (Finance); Dr Ali Muhammad (Human Resource Management); Dr Shane Mathews (International Business); Dr Kavoos Mohannak (Management); Prof Larry Neale (Marketing); Dr Anne Lane (Public Relations); Dr Marion Bateson (Biological Science); Dr James Blinco (Chemistry); Dr Luke Nothdurft (Earth Science); Dr Andrew Baker (Environmental Science); Prof Nunzio Motto (Physics) SEF: +61 7 3138 8822; Business +61 7 3138 2050 Science and Engineering: sef.enquiry@qut.edu.au; Busi@qut.edu.au | |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science, Geography or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Overview

Your business degree will give you a broad base of commercial knowledge as well as the opportunity to major in a specific business area. This understanding of business makes you more attractive to employers, even if you wish to work predominantly in a sciencebased career.

Aim

Through the combination of science and business, you will equip yourself for an exciting career at the cutting edge of scientific innovation within a range of public, private and non-profit industries.

Career outcomes

By combining your science studies with business you will develop the entrepreneurial skills necessary to sell your abilities to a range of employers. As well as the range of science-based careers available such as a scientific modeller, engineering software developer, scientific programmer, and computational scientist you could expect to gain employment as a consultant, marketer, or project manager within firms developing and taking scientific research to the marketplace.

Professional membership

Both degrees allow you to satisfy the requirements of membership of the relevant professional body for your chosen majors.

Non-standard attendance

Field work is a requirement of some areas of science.

Domestic Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor Science program and 192 credit points from the Bachelor of Business program.

Business component:

- eight Business School core units (96 credit points) *
- eight major core units (96 credit points)

*Accounting major students complete six business core units and 10 accountancy major units to allow them to complete professional requirements.

International Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor Science program and 192 credit points from the Bachelor of Business program.

Business component:

- eight Business School Core units (96 credit points) *
- eight Major Core units (96 credit points)

*Accounting major students complete six business core units and 10 accountancy major units to allow them to complete professional requirements.

Sample Structure Semesters

- <u>Semester 1 (February)</u> <u>commencements</u>
- Year 1, Semester 1



Bachelor of Science/Bachelor of Business

- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- ٠
- Year 3, Semester 1 Year 3, Semester 2 ٠
- Semester 2 (July) commencements ٠
- Year 1, Semester 2
- Year 2, Semester 1 Year 2, Semester 2 ٠
- ٠
- ٠ Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 Year 4, Semester 2

| Code | Title | | |
|---------------------------|--|--|--|
| Semester 1 (Feb | ruary) commencements | | |
| Year 1, Semester 1 | | | |
| SEB104 | Grand Challenges in Science | | |
| SEB113 | Quantitative Methods in Science | | |
| SEB115 | Experimental Science | | |
| SEB116 | Experimental Science 2 | | |
| Year 1, Semester | r 2 | | |
| BVB101 | Foundations of Biology | | |
| BVB102 | Evolution | | |
| Year 2, Semester | r 1 | | |
| BVB202 | Experimental Design and Quantitative Methods | | |
| BVB301 | Animal Biology | | |
| Year 2, Semester | r 2 | | |
| BVB201 | Biological Processes | | |
| BVB204 | Ecology | | |
| Science Core Un | it Option | | |
| Science Major Ur | nit Option | | |
| Year 3, Semester | r 1 | | |
| BVB203 | Plant Biology | | |
| BVB305 | Microbiology and the Environment | | |
| Year 3, Semester | r 2 | | |
| BVB304 | Integrative Biology | | |
| BVB313 | Population Genetics and Molecular Ecology | | |
| Semester 2 (July |) commencements | | |
| Year 1, Semester 2 | | | |
| SEB104 | Grand Challenges in Science | | |
| SEB113 | Quantitative Methods in Science | | |
| Science Core Un | it Option | | |
| Science Major Unit Option | | | |
| Year 2, Semester | r 1 | | |
| SEB115 | Experimental Science | | |

| | 2 | | |
|--------------------|--|--|--|
| Year 2, Semester | r 2 | | |
| BVB101 | Foundations of Biology | | |
| BVB102 | Evolution | | |
| Year 3, Semester | r 1 | | |
| BVB202 | Experimental Design and Quantitative Methods | | |
| BVB301 | Animal Biology | | |
| Year 3, Semester 2 | | | |
| BVB201 | Biological Processes | | |
| BVB204 | Ecology | | |
| Year 4, Semester 1 | | | |
| BVB203 | Plant Biology | | |
| BVB305 | Microbiology and the Environment | | |
| Year 4, Semester 2 | | | |
| BVB304 | Integrative Biology | | |
| BVB313 | Population Genetics and Molecular Ecology | | |
| Somostors | | | |

Semesters

- <u>Semester 1 (February)</u> commencements Year 1, Semester 1 Year 1, Semester 2 Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Semester 2 (July) commencements
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- ٠
- Year 3, Semester 1 Year 3, Semester 2 .
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title | |
|-------------------------------------|-----------------------------------|--|
| Semester 1 (February) commencements | | |
| Year 1, Semester | 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| SEB115 | Experimental Science | |
| SEB116 | Experimental Science 2 | |
| Year 1, Semester 2 | | |
| CVB101 | General Chemistry | |
| CVB102 | Chemical Structure and Reactivity | |
| Year 2, Semester 1 | | |
| CVB201 | Inorganic Chemistry | |
| CVB202 | Analytical Chemistry | |
| Year 2, Semester 2 | | |

| CVB203 | Physical Chemistry | | |
|--------------------|---|--|--|
| CVB204 | Organic Structure and | | |
| 010201 | Mechanisms | | |
| MXB100 | Introductory Calculus and Algebra | | |
| Science Core Unit | Option | | |
| Year 3, Semester | 1 | | |
| CVB301 | Organic Chemistry: Strategies for Synthesis | | |
| CVB302 | Applied Physical Chemistry | | |
| Year 3, Semester | 2 | | |
| CVB303 | Coordination Chemistry | | |
| CVB304 | Chemistry Research Project | | |
| Semester 2 (July) | | | |
| Year 1, Semester | 2 | | |
| MXB100 | Introductory Calculus and Algebra | | |
| SEB104 | Grand Challenges in Science | | |
| SEB113 | Quantitative Methods in Science | | |
| Science Core Unit | Option | | |
| Year 2, Semester 1 | | | |
| SEB115 | Experimental Science | | |
| SEB116 | Experimental Science 2 | | |
| Year 2, Semester | 2 | | |
| CVB101 | General Chemistry | | |
| CVB102 | Chemical Structure and Reactivity | | |
| Year 3, Semester | 1 | | |
| CVB201 | Inorganic Chemistry | | |
| CVB202 | Analytical Chemistry | | |
| Year 3, Semester | 2 | | |
| CVB203 | Physical Chemistry | | |
| CVB204 | Organic Structure and Mechanisms | | |
| Year 4, Semester | 1 | | |
| CVB301 | Organic Chemistry: Strategies for Synthesis | | |
| CVB302 | Applied Physical Chemistry | | |
| Year 4, Semester | 2 | | |
| CVB303 | Coordination Chemistry | | |
| CVB304 | Chemistry Research Project | | |

Semesters

- Semester 1 (February)
- commencements Year 1, Semester 2

Experimental Science

SEB116



Bachelor of Science/Bachelor of Business

- Year 1, Semester 2
- Year 2, Semester 1 •
- ٠ Year 2, Semester 2
- Year 3, Semester 1 .
- Year 3, Semester 2 ٠
- Semester 2 (July) commencements •
- Year 1, Semester 2 •
- Year 2, Semester 1 Year 2, Semester 2 .
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 •
- ٠ Year 4, Semester 2

| Code | Title | | |
|---------------------------------|---|--|--|
| Semester 1 (Fel | pruary) commencements | | |
| Year 1, Semeste | er 2 | | |
| SEB104 | Grand Challenges in Science | | |
| SEB113 | Quantitative Methods in Science | | |
| SEB115 | Experimental Science 1 | | |
| SEB116 | Experimental Science 2 | | |
| Year 1, Semeste | er 2 | | |
| ERB101 | Earth Systems | | |
| ERB102 | Evolving Earth | | |
| Year 2, Semeste | er 1 | | |
| ERB201 | Destructive Earth: Natural Hazards | | |
| ERB202 | Marine Geoscience | | |
| Year 2, Semeste | er 2 | | |
| ERB203 | Sedimentary Geology and Stratigraphy | | |
| ERB204 | Deforming Earth: Fundamentals of Structural Geology | | |
| Science Core Unit Option | | | |
| Science Major Unit Option | | | |
| Year 3, Semeste | er 1 | | |
| ERB301 | Chemical Earth | | |
| ERB302 | Applied Geophysics | | |
| Year 3, Semeste | er 2 | | |
| ERB303 | Energy Resources and Basin Analysis | | |
| ERB304 | Dynamic Earth: Plate Tectonics | | |
| Semester 2 (July) commencements | | | |
| Year 1, Semester 2 | | | |
| SEB104 | Grand Challenges in Science | | |
| SEB113 | Quantitative Methods in Science | | |
| Science Core Unit Option | | | |
| Science Major Unit Option | | | |
| Year 2, Semester 1 | | | |

| | Applied Geophysics | | SEB104 |
|---------------------|--|--|------------|
| ester 2 | | | |
| | Energy Resources and Basin Analysis | | SEB113 |
| | Dynamic Earth: Plate Tectonics | | SEB115 |
| July) commencements | | | SEB116 |
| ester 2 | | | Year 1, Se |
| | Grand Challenges in | | |
| | Science | | ERB101 |
| | Quantitative Methods in Science | | EVB102 |
| e Unit Option | | | Year 2, Se |
| | ···· • F ····· | | |

| Year 2, Semester 1 | | |
|--------------------|------------------------|--|
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 2, Semester 2 | | |
| ERB101 | Earth Systems | |

| ERB102 | Evolving Earth | |
|--------------------|---|--|
| Year 3, Semester 1 | | |
| ERB201 | Destructive Earth: Natural Hazards | |
| ERB202 | Marine Geoscience | |
| Year 3, Semest | er 2 | |
| ERB203 | Sedimentary Geology and Stratigraphy | |
| ERB204 | Deforming Earth: Fundamentals of Structural Geology | |
| Year 4, Semester 1 | | |
| ERB301 | Chemical Earth | |
| ERB302 | Applied Geophysics | |
| Year 4, Semester 2 | | |
| ERB303 | Energy Resources and Basin Analysis | |
| ERB304 | Dynamic Earth: Plate Tectonics | |

Semesters

- Semester 1 (February) commencements Year 1, Semester 1 Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Semester 2 (July) commencements
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2 Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title | | |
|--------------------|--|--|--|
| Semester 1 (Feb | Semester 1 (February) commencements | | |
| Year 1, Semeste | Year 1, Semester 1 | | |
| SEB104 | Grand Challenges in Science | | |
| SEB113 | Quantitative Methods in Science | | |
| SEB115 | Experimental Science | | |
| SEB116 | Experimental Science 2 | | |
| Year 1, Semester 2 | | | |
| ERB101 | Earth Systems | | |
| EVB102 | Ecosystems and the Environment | | |
| Year 2, Semeste | r 1 | | |
| BVB202 | Experimental Design and Quantitative Methods | | |
| EVB203 | Geospatial Information Science | | |
| Year 2, Semester 2 | | | |
| BVB204 | Ecology | | |

Environmental EVB302 Pollution Science Core Unit Option Science Major Unit Option Year 3, Semester 1 **BVB311 Conservation Biology** Soils and the **EVB312** Environment Year 3, Semester 2 **ERB310** Groundwater Systems Case Studies in EVB304 Environmental Science Semester 2 (July) commencements Year 1, Semester 2 Grand Challenges in **SEB104** Science Quantitative Methods **SEB113** in Science Science Core Unit Option Science Major Unit Option Year 2, Semester 1 **Experimental Science** SEB115 1 **Experimental Science SEB116** 2 Year 2, Semester 2 Earth Systems **ERB101** Ecosystems and the **EVB102** Environment Year 3, Semester 1 Experimental Design **BVB202** and Quantitative Methods **Geospatial Information** EVB203 Science Year 3, Semester 2 **BVB204** Ecology Environmental EVB302 Pollution Year 4, Semester 1 **BVB311 Conservation Biology** Soils and the **EVB312** Environment Year 4, Semester 2 **ERB310** Groundwater Systems Case Studies in EVB304 Environmental Science

Semesters

- Semester 1 (February) commencements
- Year 1, Semester 1
- Year 1, Semester 2 Year 2, Semester 1
- •
- Year 2, Semester 2 Year 3, Semester 1
- Year 3, Semester 2

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=IX23&courseID=32804. CRICOS No.00213J



Bachelor of Science/Bachelor of Business

- Semester 2 (July) commencements
- Year 1, Semester 2
- Year 2, Semester 1
 Year 2, Semester 2
 Year 3, Semester 2
- Year 3, Semester 2
 Year 4, Semester 1
- Year 4, Semester 2

| Code | Title |
|--------------------------|--|
| | ary) commencements |
| Year 1, Semester | 1 |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| SEB115 | Experimental Science 1 |
| SEB116 | Experimental Science 2 |
| Year 1, Semester | 2 |
| PVB101 | Physics of the Very Large |
| PVB102 | Physics of the Very Small |
| Year 2, Semester | 1 |
| PVB200 | Computational and Mathematical Physics |
| PVB203 | Experimental Physics |
| Year 2, Semester | 2 |
| PVB202 | Mathematical Methods in Physics |
| PVB204 | Electromagnetism |
| MXB100 | Introductory Calculus and Algebra |
| Science Core Unit | Option |
| Year 3, Semester | 1 |
| PVB301 | Materials and Thermal Physics |
| PVB302 | Classical and Quantum Physics |
| Year 3, Semester | 2 |
| PVB303 | Nuclear and Particle Physics |
| PVB304 | Physics Research |
| Semester 2 (July) | |
| Year 1, Semester | 1 |
| MXB100 | Introductory Calculus and Algebra |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| Science Core Unit Option | |
| Year 2, Semester | 1 |
| SEB115 | Experimental Science 1 |

| SEB116 | Experimental Science 2 | |
|--|--|--|
| Year 2, Semester 2 | | |
| PVB101 | Physics of the Very Large | |
| PVB102 | Physics of the Very Small | |
| Year 3, Semester | 1 | |
| PVB200 | Computational and Mathematical Physics | |
| PVB203 | Experimental Physics | |
| Year 3, Semester 2 | | |
| rear 3, Semester | 2 | |
| PVB202 | 2 Mathematical Methods in Physics | |
| | Mathematical | |
| PVB202 | Mathematical Methods in Physics Electromagnetism | |
| PVB202 PVB204 | Mathematical Methods in Physics Electromagnetism | |
| PVB202 PVB204 Year 4, Semester | Mathematical Methods in Physics Electromagnetism Materials and | |
| PVB202 PVB204 Year 4, Semester PVB301 | Mathematical Methods in Physics Electromagnetism Materials and Thermal Physics Classical and Quantum Physics | |
| PVB202 PVB204 Year 4, Semester PVB301 PVB302 | Mathematical Methods in Physics Electromagnetism Materials and Thermal Physics Classical and Quantum Physics | |



| Year | 2018 |
|------------------------------|--|
| QUT code | IX28 |
| CRICOS | 061649J |
| Duration (full-time) | 5 years |
| OP | 8 |
| Rank | 84 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | |
| Credit points full-time sem. | 48 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Science & Engineering Faculty Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 or, Director of Studies, QUT Business School; email: bus@qut.edu.au |
| Discipline Coordinator | Dr Brian Lee (Civil); Dr Jacob Coetzee (Electrical); Professor Ted Steinberg (Mechanical); Associate Prof Belinda Luke (Accountancy); Dr Louise Kelly (Advertising); Dr Radhika Lahiri (Economics); Dr Mark Doolan (Finance); Dr Ali Muhammad (Human Resource Management); Dr Shane Mathews (International Business); Dr Kavoos Mohannak (Management); Prof Larry Neale (Marketing); and Dr Anne Lane (Public Relations) Engineering: 3138 8822; Business: 3138 2050 Engineering: sef.enquiry@qut.edu.au; Business: bus@qut.com |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Accountancy, finance, economics and marketing majors also requires 4 SA in Maths A, B or C.

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Accountancy, Finance, Economics and Marketing majors also requires 4 SA in Maths A, B or C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Career Outcomes

Electrical and computer engineers design, install and maintain electrical, electronic, telecommunications and computing systems on behalf of governments and private companies. Graduates of the Bachelor of Business are skilled in many aspects of business including: accountancy, advertising, finance, economics, human resource management, international business, management, marketing and public relations.

Overview

Students combine engineering knowledge in electronics, computer systems, telecommunications and electric power with a business course majoring in one of accountancy, advertising, economics, finance, human resource management, international business, management, marketing or public relations.

Professional Recognition

This degree meets the requirements for membership of Engineers Australia.

Business component: Students may be eligible for membership to a number of professional bodies depending on choice of major and unit selection. Details on professional recognition can be found under the individual majors of the <u>Bachelor of Business (BS05)</u>.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering must obtain at least 60 days of industrial employment/practice in an engineering environment as part of the Work Integrated Learning unit, before graduating.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Course Design

Students are required to complete 480 credit points comprised of 288 credit points from the Bachelor of Engineering program and 192 credit points from the Bachelor of Business program. Students supplement the engineering component of this program with the 96 credit point Business School Core units in the Bachelor of Business program together with a 96 credit point Major in one of the following: Accountancy, Advertising, Economics, Finance, Human Resource Management, International Business, Management, Marketing or Public Relations.

Important Information

QUT Business School rules and procedures are outlined in the <u>Business</u> <u>Undergraduate Guidelines booklet</u>. Other useful information can be found on <u>Student Services</u> website.

Domestic Course structure

Students are required to complete 480 credit points comprised of 288 credit points from the Bachelor of Engineering program and 192 credit points from the Bachelor of Business program.

The business component consists of the 96 credit point Business School core units

(eight units) together with a 96 credit point major (eight units) in one of the following:

- Accountancy*
- Advertising
- Economics
- Finance
- Human resource management
- International business Management
- Marketing
- Public relations.

*Accounting major students complete 6 Business Core Units and 10 Accountancy major units to allow them to complete professional requirements.

International Course structure

Course Design

Students are required to complete 480 credit points comprised of 288 credit points from the Bachelor of Engineering program and 192 credit points from the Bachelor of Business program. Students supplement the engineering component of this program with the 96 credit point Business School Core units in the Bachelor of Business program together with a 96 credit point major in one of the following:

- Accountancy*
- Advertising
- Economics
- Finance
- Human Resource Management
- International Business
- Management
- Marketing
- Public Relations.

*Accounting major students complete 6 Business Core Units and 10 Accountancy major units to allow them to complete professional requirements.

Sample Structure Course Updates

A number of changes have been made to Science and Engineering Faculty courses. From 2015, units in the Engineering component of IX28 will progressively be recoded, renamed or discontinued (for students who commenced the course prior to 2015). To see how these changes affect you, please consult Engineering unit replacement table below in conjunction with the course structure. Affected Study Plans are being amended to reflect the changes. Please contact the Faculty if you have any concerns.

Engineering Unit Replacement Table

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1 • Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2 .
- Year 4, Semester 1
- Year 4, Semester 2
- Year 5, Semester 1 Year 5, Semester 2 .

Code Title Year 1. Semester 1 **EGB121 Engineering Mechanics** [ENB110 replaced by EGB121 in SEM-2 2015] Introductory **MZB125** Engineering **Mathematics** [MAB125 replaced by MZB125 in 2015] OR Linear Algebra and **MXB106 Differential Equations** [MAB126 replaced by MXB106 in 2016] **Business Unit -1** Business Unit -2 Year 1, Semester 2 Foundations of **EGB120 Electrical Engineering** [ENB120 replaced by EGB120 in 2015] Linear Algebra and **MXB106 Differential Equations** [MAB126 replaced by MXB106 in 2016] OR Calculus of One and **MXB105 Two Variables** [MAB127 replaced by MXB105 in SEM-2 20151 Business Unit -3 Business Unit -4 Year 2, Semester 1 Engineering EGB100 Sustainability and **Professional Practice** [ENB100 replaced by EGB100 in 2015] Energy in Engineering **EGB113** Systems [ENB130 replaced by EGB113 in 2015] **Civil Engineering EGB270** Materials [ENB273 replaced by EGB270 in 2016] **EGB121 Engineering Mechanics** OR **Civil Engineering EGB123** Systems ENB270 replaced by EGB121 (or EGB123 if EGB121 done previously) in 2017.

Engineering Unit Option [Engineering Unit Option replaces ENB200 in 2015. See Engineering Unit Option List] Introduction to **MXB107** Statistical Modelling [MAB233 replaced by MXB107 in SEM-2 2015.] Business Unit -5 Business Unit -6 Year 3, Semester 1 Foundation of EGB111 Engineering Design [ENB150 is replaced by EGB111 from 2015] Geotechnical EGB373 Engineering [ENB272 replaced by EGB373 in 2017. EGB373 is a SEM-2 unit.] **Engineering Hydraulics** EGB371 [ENB280 replaced by EGB371 in 2017] Business Unit -7 Year 3, Semester 2 **Design of Concrete** EGB375 Structures [ENB276 replaced by EGB375 in 2017. EGB375 is a SEM-1 unit.] Principles of **EGB273** Construction [ENB275 replaced by EGB273 in 2016.] Geotechnical **ENB371** Engineering 2 **Business Unit -8** Year 4, Semester 1 Advanced Highway and **EGH472** Pavement Engineering [ENB372 replaced by EGH472 in 2017. EGH472 is a SEM-2 unit.] **EGB376** Steel Design [ENB375 replaced by EGB376 in 2017. EGB376 is a SEM-2 unit.] **Business Unit-9 Business Unit-10** Year 4, Semester 2 **ENB376** Transport Engineering **Business Unit-13 Business Unit-11 Business Unit-12** Year 5, Semester 1 **BEB801** Project 1 **ENB378** Water Engineering Design of Concrete **ENB471** Structures and Foundations **Business Unit-14**

Year 2, Semester 2

Year 5, Semester 2

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=IX28&courseID=33491. CRICOS No.00213J



| ENB476 | Civil Engineering Design Project |
|-------------------|-------------------------------------|
| SEB701 | Work Integrated Learning 1 |
| Business Unit- 15 | |
| Business Unit-16 | |

Course Updates

A number of changes have been made to Science and Engineering Faculty courses. From 2015, units in the Engineering component of IX28 will progressively be recoded, renamed or discontinued (for students who commenced the course prior to 2015). To see how these changes affect you, please consult Engineering unit replacement table below in conjunction with the course structure. Affected Study Plans are being amended to reflect the changes. Please contact the Faculty if you have any concerns.

Engineering Unit Replacement Table

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
 Year 2, Semester 2
- Year 2, Semester 2
 Year 3, Semester 1
- Year 3, Semester 1
- Year 4, Semester 1
- Year 4, Semester 2
- Year 5, Semester 1
- Year 5, Semester 2
- Electrical Engineering Selectives

| Code | Title | |
|-------------------------------------|--|--|
| Year 1, Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| [ENB130 replaced by EGB113 in 2015] | | |
| MZB125 | Introductory Engineering Mathematics | |
| [MAB125 replaced by MZB125 in 2015] | | |
| OR | | |
| MXB106 | Linear Algebra and Differential Equations | |
| [MAB126 replaced by MXB106 in 2016] | | |
| Business Unit-1 | | |
| Business Unit-2 | | |
| Year 1, Semester 2 | | |
| EGB120 | Foundations of Electrical Engineering | |
| [ENB120 replaced by EGB120 in 2015] | | |
| MXB106 | Linear Algebra and Differential Equations | |
| [MAB126 replaced by MXB106 in 2016] | | |

| OR | |
|------------------------------------|---|
| MXB105 | Calculus of One and Two Variables |
| [MAB127 replace 2015] | ed by MXB105 in SEM-2 |
| Business Unit-3 | |
| Business Unit-4 | |
| Year 2, Semeste | er 1 |
| | Engineering |
| EGB100 | Sustainability and Professional Practice |
| ENR100 roplag | ed by EGB100 in 2015] |
| EGB121 | |
| | Engineering Mechanics ed by EGB121 in SEM-2 |
| 2015] | |
| Engineering Uni | t Option |
| | Electromagnetics and |
| EGB241 | Machines |
| | it Option replaced 5. See Engineering Unit |
| ELEC-OPTIONS | 6 |
| OR | |
| | ed by EGB241 or ELEC- |
| | th ENB250 and ENB343 |
| onplan) in 2016. Year 2, Semest | - |
| | Calculus of One and |
| MXB105 | Two Variables |
| [MAB127 replace 2015] | ed by MXB105 in SEM-2 |
| OR | |
| MXB107 | Introduction to Statistical Modelling |
| [MAB233 replace 2015] | ed by MXB107 in SEM-2 |
| Business Unit-5 | |
| Business Unit-6 | |
| Business Unit-7 | |
| Year 3, Semeste | er 1 |
| EGB111 | Foundation of |
| ENB150 roples | Engineering Design |
| EGB348 | ed by EGB111 in 2015] Electronics |
| | ed by EGB348 in 2017. |
| EGB348 is a SE | M-2 unit.] |
| MZB126 | Engineering Computation |
| | ed by MZB126 in 2017] |
| Business Unit -8 | |
| Year 3, Semeste | |
| EGB242 | Signal Analysis |
| - | ed by EGB242 in 2016.] |
| ELEC-OPTIONS | |
| | ed by ENB205 or ELEC- th ENB242 and ENB243 .] |

Microprocessors and CAB202 **Digital Systems** [ENB244 replaced by CAB202 in 2014] **Business Unit-9** Year 4, Semester 1 Control and Dynamic EGB345 Systems [ENB301 replaced by EGB345 in 2016. EGB345 is a SEM-2 unit.] Energy Supply and EGB341 Delivery [ENB340 replaced by EGB341 in 2017. EGB341 is a SEM-2 unit.] OR Introduction to **MXB107** Statistical Modelling MAB233 is replaced by MXB107 **EGB240 Electronic Design** [ENB245 replaced by EGB240 in 2016.] **Business Unit-10** Year 4, Semester 2 [ENB345 replaced by EGB340 in 2017. EGB340 is a SEM-1 unit.] **EGB340 Design and Practice Business Unit-11 Business Unit-12 Business Unit-13** Year 5, Semester 1 **BEB801** Project 1 Work Integrated **SEB701** Learning 1 Energy Supply and EGB341 Delivery [ENB340 replaced by EGB341 in 2017. EGB341 is a SEM-2 unit.] OR **Electrical Engineering Selectives Business Unit-14** Year 5, Semester 2 **BEB802** Project 2 **ENB344** Industrial Electronics **Business Unit-15 Business Unit-16** Electrical Engineering Selectives EGB339 Introduction to Robotics [ENB399 replaced by EGB339 in 2016] **Digital Signals and** EGH444 Image Processing [ENB448 replaced by EGH444 in 2017] Power Systems **EGH440** Analysis [ENB452 replaced by EGH440 in 2017] Power Equipment and **ENB453** Utilisation **ENB456** Energy [ENB458 replaced by EGH445 in 2017]

| EGH445 | Modern Control |
|--|--|
| MXB107 | Introduction to Statistical Modelling |
| PLEASE NOTE: | |
| The following units have been discontinued, but will count as a selective: | |
| ENB457 Controls, Systems and Applications (disc 30/06/2017) | |
| | |

Course Updates

A number of changes have been made to Science and Engineering Faculty courses. From 2015, units in the Engineering component of IX28 will progressively be recoded, renamed or discontinued (for students who commenced the course prior to 2015). To see how these changes affect you, please consult Engineering unit replacement table below in conjunction with the course structure. Affected Study Plans are being amended to reflect the changes. Please contact the Faculty if you have any concerns..

Engineering Unit Replacement Table

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
 Year 2, Semester 1
- Year 2, Semester 1
 Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Year 5, Semester 1
- Year 5, Semester 2
- Mechanical Engineering Selectives

| Code | Title | |
|---|--|--|
| Year 1, Semester 1 | | |
| EGB121 | Engineering Mechanics | |
| [ENB110 replaced by EGB121 in SEM-2 2015] | | |
| MZB125 | Introductory Engineering Mathematics | |
| [MAB125 replaced by MZB125 in 2015] | | |
| OR | | |
| MXB106 | Linear Algebra and Differential Equations | |
| [MAB126 replaced by MXB106 in 2016] | | |
| Business Unit - 1 | | |
| Business Unit - 2 | | |
| Year 1, Semester 2 | | |
| EGB120 | Foundations of Electrical Engineering | |
| [ENB120 replaced by EGB120 in 2015] | | |

| MXB106 | Linear Algebra and Differential Equations | |
|---|--|--|
| [MAB126 replac | ed by MXB106 in 2016] | |
| OR | | |
| MXB105 | Calculus of One and Two Variables | |
| [MAB127 replaced by MXB105 in SEM-2 2015] | | |
| Business Unit - 3 | 3 | |
| Business Unit - | - | |
| Year 2, Semeste | | |
| | Engineering | |
| EGB100 | Sustainability and Professional Practice | |
| [ENB100 replace | ed by EGB100 in 2015] | |
| EGB113 | Energy in Engineering Systems | |
| [ENB130 replace | ed by EGB113 in 2015] | |
| EGB314 | Strength of Materials | |
| [ENB212 replace | ed by EGB314 in 2016] | |
| Engineering Uni | t Option | |
| [Engineering Unit Option replaces ENB200 in 2015. See Engineering Unit Option List] | | |
| Year 2, Semeste | er 2 | |
| MXB105 | Calculus of One and Two Variables | |
| [MAB127 replac 2015] | ed by MXB105 in SEM-2 | |
| MXB107 | Introduction to Statistical Modelling | |
| INADOOD | | |
| [MAB233 replac 2015] | ed by MXB107 in SEM-2 | |
| | - | |
| 2015] | 5 | |
| 2015] Business Unit - Business Unit - (| 5 | |
| 2015] Business Unit - 9 Business Unit - 9 | - 5 6 7 | |
| 2015] Business Unit - 9 Business Unit - 9 Business Unit - | - 5 6 7 | |
| 2015] Business Unit - 9 Business Unit - 9 Business Unit - Year 3, Semeste EGB211 | 5 6 7 er 1 | |
| 2015] Business Unit - 9 Business Unit - 9 Business Unit - Year 3, Semeste EGB211 | 5 6 7 er 1 Dynamics | |
| 2015] Business Unit - 9 Business Unit - 9 Business Unit - 7 Year 3, Semester EGB211 [ENB211 replace EGB214 | 5 6 7 er 1 Dynamics ed by EGB211 in 2016] Materials and | |
| 2015] Business Unit - 9 Business Unit - 9 Business Unit - 7 Year 3, Semester EGB211 [ENB211 replace EGB214 | 5 6 7 er 1 Dynamics ed by EGB211 in 2016] Materials and Manufacturing | |
| 2015] Business Unit - 9 Business Unit - 9 Business Unit - 9 Year 3, Semester EGB211 [ENB211 replace EGB214 [ENB231 replace EGB111 | 5 6 7 er 1 Dynamics ed by EGB211 in 2016] Materials and Manufacturing ed by EGB214 in 2016] Foundation of | |
| 2015] Business Unit - 9 Business Unit - 9 Business Unit - 9 Year 3, Semester EGB211 [ENB211 replace EGB214 [ENB231 replace EGB111 | 5 6 7 er 1 Dynamics ed by EGB211 in 2016] Materials and Manufacturing ed by EGB214 in 2016] Foundation of Engineering Design | |
| 2015] Business Unit - 9 Business Unit - 9 Business Unit - 9 Year 3, Semester EGB211 [ENB211 replace EGB214 [ENB231 replace EGB111 [ENB150 replace | 5 6 7 er 1 Dynamics ed by EGB211 in 2016] Materials and Manufacturing ed by EGB214 in 2016] Foundation of Engineering Design ed by EGB111 in 2015] Electrical and Computer Engineering | |
| 2015] Business Unit - 3 Business Unit - 4 Business Unit - 4 Business Unit - 4 Pear 3, Semester EGB211 [ENB211 replace EGB214 [ENB231 replace EGB111 [ENB150 replace ENB205 | 5 6 7 er 1 Dynamics ed by EGB211 in 2016] Materials and Manufacturing ed by EGB214 in 2016] Foundation of Engineering Design ed by EGB111 in 2015] Electrical and Computer Engineering | |
| 2015] Business Unit - 3 Business Unit - 4 Business Unit - 4 Business Unit - 4 Pear 3, Semester EGB211 [ENB211 replace EGB214 [ENB150 replace ENB205 Year 3, Semester EGB210 | 5 6 7 er 1 Dynamics ed by EGB211 in 2016] Materials and Manufacturing ed by EGB214 in 2016] Foundation of Engineering Design ed by EGB111 in 2015] Electrical and Computer Engineering er 2 Fundamentals of Mechanical Design ed by EGB210 in 2016. | |
| 2015] Business Unit - 3 Business Unit - 4 Business Unit - 4 Business Unit - 4 Pear 3, Semester EGB211 [ENB211 replace EGB214 [ENB150 replace ENB205 Year 3, Semester EGB210 [ENB215 replace | 5 6 7 er 1 Dynamics ed by EGB211 in 2016] Materials and Manufacturing ed by EGB214 in 2016] Foundation of Engineering Design ed by EGB111 in 2015] Electrical and Computer Engineering er 2 Fundamentals of Mechanical Design ed by EGB210 in 2016. | |
| 2015] Business Unit - 4 Business Unit - 4 Business Unit - 4 Business Unit - 4 Pear 3, Semester EGB211 [ENB211 replace EGB214 [ENB231 replace EGB111 [ENB150 replace ENB205 Year 3, Semester EGB210 [ENB215 replace EGB210 is a SE EGB323 | 5 6 7 er 1 Dynamics ed by EGB211 in 2016] Materials and Manufacturing ed by EGB214 in 2016] Foundation of Engineering Design ed by EGB111 in 2015] Electrical and Computer Engineering er 2 Fundamentals of Mechanical Design ed by EGB210 in 2016. M-1 unit.] Fluid Mechanics ed by EGB323 in 2016] | |
| 2015] Business Unit - 4 Business Unit - 4 Business Unit - 4 Business Unit - 4 Pear 3, Semester EGB211 [ENB211 replace EGB214 [ENB231 replace EGB111 [ENB150 replace ENB205 Year 3, Semester EGB210 [ENB215 replace EGB210 is a SE EGB323 | 5 6 7 9 9 9 9 9 9 9 9 9 9 9 9 9 | |

EGB336 Lean Manufacturing [ENB331 replaced by EGB214 (or EGB336 if EGB214 already on plan). EGB214 is a SEM-1 unit.] **Business Unit -8** Year 4, Semester 1 **EGB322** Thermodynamics [ENB222 replaced by EGB322 in 2017. EGB322 is a SEM-2 unit.] Work Integrated SFB701 Learning 1 Business Unit - 9 Business Unit - 10 Year 4, Semester 2 Introduction to **MXB107** Statistical Modelling [MAB233 replaced by MXB107 in SEM-2 2015] OR Mechanical Engineering Selective Business Unit - 11 Business Unit - 12 Business Unit - 13 Year 5, Semester 1 **BEB801** Project 1 **EGH414** Stress Analysis [ENB311 replaced by EGH414 in 2017] OR EGB321 **Dynamics of Machines** [ENB312 replaced by EGB321 in 2017] OR **ENB421** Thermodynamics 2 Design of Machine EGB316 Elements [ENB316 replaced by EGB316 in 2017] Business Unit - 14 Year 5, Semester 2 **BEB802** Project 2 **EGH421** Vibration and Control [ENB313 replaced by EGH421 in 2017. EGH421 is a SEM-1 unit.] OR **Mechanical Systems EGH420** Design [ENB317 replaced by EGH420 in 2017] OR Fluids Dynamics **EGH423** [ENB321 replaced by EGH423 in 2017.] Business Unit - 15 Business Unit - 16 **Mechanical Engineering Selectives** EGB336 Lean Manufacturing [ENB336 replaced by EGB336 in 2016.] **FGB339** Introduction to Robotics [ENB339 replaced by EGB339 in 2016.]



| EGB422 | Energy Management | |
|---|---|--|
| [ENB422 replaced by EGB422 in 2016.] | | |
| EGB423 | Heating, Ventilation and Air Conditioning | |
| [ENB423 replaced by EGB423 in 2016.] | | |
| EGB432 | Asset Management and Maintenance | |
| [ENB432 replaced by EGB432 in 2016.] | | |
| EGB434 | Tribology | |
| [ENB434 replaced by EGB434 in 2016.] | | |
| EGH360 | Plant and Process Design | |
| [ENB433 replaced by EGB360 in 2016. EGB360 recoded as EGH360 in 2017.] | | |
| EGH413 | Advanced Dynamics | |
| [ENB314 replaced by EGH413 in 2017.] | | |
| ENB333 | Operations Management | |
| ENB435 | Computer Integrated Manufacturing | |
| MXB107 | Introduction to Statistical Modelling | |



| Year | 2018 |
|-----------------------------------|--|
| QUT code | IX30 |
| CRICOS | 059601K |
| Duration (full-time) | 4 years |
| OP | 7 |
| Rank | 86 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$10,200 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,200 per year full-time (96 credit points) |
| Total credit points | 384 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Director of Studies, QUT Business School; Associate Professor Tim Moroney (Mathematics) |
| Discipline Coordinator | Associate Prof Belinda Luke (Accountancy); Nicolas Pontes (Advertising); Dr Radhika Lahiri (Economics); Dr Mark Doolan (Finance); Dr Ali Muhammad (Human Resource Management); Dr Shane Mathews (International Business); Dr Kavoos Mohannak (Management); Prof Larry Neale (Marketing); and Dr Anne Lane (Public Relations). TBA (Applied and Computational Mathematics); Associate Prof Paul Corry (Decision Science); and Associate Prof Chris Drovandi (Statistical Science) Business +61 7 3138 82050; Maths: +61 7 3138 8222 Business Student Services: bus@qut.edu.au; Mathematics: Student Services - sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Overview

Your Business studies will combine the broad knowledge of business practice and in depth studies in at least one business discipline area in the Bachelor of Business with the advanced quantitative skills and problem solving abilities that you will develop with the Bachelor of Mathematics.

You will develop the ability to apply mathematics, statistics, computational methods and decision science to real world problems. You will also gain understanding of the broad principles of Business at the same time as developing the skills and discipline knowledge necessary to enter the business career of your choice.

Career Outcomes

Combining business and mathematics offers diverse and sustainable career opportunities.

Business graduates are equipped to undertake sophisticated economic and

financial modelling which is important in business and government decision making. Quantitative analysts are employed by the financial sector in order to optimise returns both in the short and long-term. Graduates may also become actuarial trainees in the insurance and superannuation area although further study is required in order to qualify as an actuary.

Business graduates may find employment as Accountants, Advertising Professionals, Banking and Finance Consultants, Economists, Human Resource Managers, International Business Specialists, Managers, Marketing Officers, Public Relations Officers.

Mathematics graduates are employed across a wide range of areas. These include, but are not limited to, finance, investment, data analytics, defence and national security, research, information technology, environmental science, health, management, marketing, logistics, media, and education. In addition to their knowledge and skills in mathematics, graduates are also highly valued for their analytical and problem-solving skills. Development of skills in communication, problem-solving, critical thinking and teamwork form an integral part of the course.

Favourable career outcomes for Bachelor of Mathematics graduates are likely due to the current demand for qualified statisticians and mathematicians.

Professional Recognition

Both degrees allow you to satisfy the requirements of membership of the relevant professional body for your chosen majors.

Financial Support

You should consider applying for an industry-sponsored mathematics bursary or a business scholarship to help you financially throughout your studies. For further information visit <u>Scholarships</u>.

Domestic Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Mathematics program and 192 credit points from the Bachelor of Business program.

Business component:

 eight Business School core units (96 credit points) including MGB227

Bachelor of Business/Bachelor of Mathematics

(see below)*

• eight major core units (96 credit points)

*Please note that BSB123 Data Analysis (one of the Business School core units) is not required as the content of MXB107 covers similar topics. MGB227 Entrepreneurship replaces BSB123.

*Accounting major students complete six business core units and 10 accountancy major units to allow them to complete professional requirements.

Mathematics component:

- six core units (72 credit points), which are further divided into four mathematics core units (48 credit points), and two core option units (24 credit points) selected from an approved list
- 10 major core units (120 credit points)

Mathematics core units

These units give you the grounding in mathematical theory and practice upon which your major units will build, and also provide an introductory taste of each of the three majors: applied and computational mathematics; decision science; and statistical science.

Core option units

You may choose from a wide variety of introductory units from other disciplines offered at QUT, or you may choose additional mathematics units. The additional mathematics units include a unit specially designed to assist students without a background of successful study in Mathematics C at high school; an alternative unit aimed at high achieving students that explores some interesting and unusual aspects of mathematics in some detail; and a unit introducing the field of computational and simulation science which combines mathematics, science and computing to simulate realworld problems.

International Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Mathematics program and 192 credit points from the Bachelor of Business program.

Business component:

- eight Business School core units (96 credit points) including MGB227 (see below)*
- eight major core units (96 credit points)

*Please note that BSB123 Data Analysis (one of the Business School core units) is not required as the content of MXB107 covers similar topics. MGB227 Entrepreneurship replaces BSB123.

*Accounting major students complete six business core units and 10 accountancy major units to allow them to complete professional requirements.

Mathematics component:

- Six core units (72 credit points), which are further divided into four mathematics core units (48 credit points), and two core option units (24 credit points) selected from an approved list
- 10 major core units (120 credit points)

Mathematics core units

These units give you the grounding in mathematical theory and practice upon which your major units will build, and also provide an introductory taste of each of the three majors: applied and computational mathematics; decision science; and statistical science.

Core option units

You may choose from a wide variety of introductory units from other disciplines offered at QUT, or you may choose additional mathematics units. The additional mathematics units include a unit specially designed to assist students without a background of successful study in Mathematics C at high school; an alternative unit aimed at high achieving students that explores some interesting and unusual aspects of mathematics in some detail: and a unit introducing the field of computational and simulation science which combines mathematics, science and computing to simulate realworld problems.

Sample Structure Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
 Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2

Code Title Year 1 Semester 1 Business School Unit

Business School Unit

Maths Core Unit

Business School Unit Maths Common Major Unit Maths Common Major Unit Year 2 Semester 1 **Business School Unit Business School Unit** Maths Core Unit Maths Core Unit Year 2 Semester 2 **Business School Unit Business School Unit** Maths Core Unit Maths Core Option Unit Year 3 Semester 1 **Business School Unit Business School Unit** Maths Common Major Unit Maths Major Unit Year 3 Semester 2 **Business School Unit Business School Unit** Maths Common Major Unit Maths Major Unit Year 4 Semester 1 **Business School Unit Business School Unit** Maths Major Unit Maths Major Unit Year 4 Semester 2 **Business School Unit Business School Unit**

Maths Core Option Unit

Year 1 Semester 2

Business School Unit

Semesters

Maths Major Unit

<u>Applied and Computational</u>

Maths Major Unit (capstone)

- Mathematics Major unit set: • Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- <u>NOTE:</u>

| Code | Title |
|---------------------------------------|---------|
| Applied and Computational Mathematics | |
| Major unit set: | |
| Year 1 Sem | ester 1 |

| MXB102 | Abstract Mathematical Reasoning |
|---------------------------|------------------------------------|
| Maths Core Options Unit** | |



Bachelor of Business/Bachelor of Mathematics

| OR | | |
|--|---|--|
| MXB101 | Probability and Stochastic | |
| Modelling 1 OR | | |
| MXB103 | Introductory Computational Mathematics | |
| Year 1 Sem | ester 2 | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| (PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors) | | |
| Year 2 Sem | ester 1 | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| OR Maths Core Options Unit** (select if completed MXB101 in first year) | | |
| MXB103 | Introductory Computational Mathematics | |
| OR Maths Core Options Unit** (select if completed MXB103 in first year) | | |
| Year 2 Semester 2 | | |
| MXB107 | Introduction to Statistical Modelling | |
| Maths Core Options Unit** | | |
| Year 3 Sem | ester 1 | |
| MXB201 | Advanced Linear Algebra | |
| MXB221 | Ordinary Differential Equations | |
| Year 3 Sem | ester 2 | |
| MXB202 | Advanced Calculus | |
| MXB222 | Computational Linear | |
| | Algebra | |
| Year 4 Sem | | |
| Year 4 Sem MXB321 | | |
| | ester 1 | |
| MXB321 | ester 1 Applied Transport Theory Partial Differential Equations | |
| MXB321 MXB322 | ester 1 Applied Transport Theory Partial Differential Equations | |
| MXB321 MXB322 Year 4 Sem | ester 1 Applied Transport Theory Partial Differential Equations ester 2 | |
| MXB321 MXB322 Year 4 Sem MXB323 | ester 1 Applied Transport Theory Partial Differential Equations ester 2 Dynamical Systems Computational Fluid | |

Semesters

- Decision Science Major unit set:
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
 Year 2 Semester 2
 Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2 ٠
- NOTE:

| Code | Title | | |
|---|--|--|--|
| Decision Sc | ience Major unit set: | | |
| Year 1 Sem | ester 1 | | |
| MXB102 | Abstract Mathematical Reasoning | | |
| Maths Core Options Unit** | | | |
| OR | | | |
| MXB101 | Probability and Stochastic Modelling 1 | | |
| OR | | | |
| MXB103 | Introductory Computational Mathematics | | |
| Year 1 Semester 2 | | | |
| MXB105 | Calculus of One and Two Variables | | |
| MXB106 | Linear Algebra and Differential Equations | | |
| | OTE: you will need to | | |
| nominate yo | our Maths major in your | | |
| | to select MXB105 and nese units are common to all | | |
| three Maths | | | |
| Year 2 Sem | | | |
| MXB101 | Probability and Stochastic Modelling 1 | | |
| OR Maths Core Options Unit** (select if completed MXB101 in first year) | | | |
| MXB103 | Introductory Computational Mathematics | | |
| OR Maths Core Options Unit** (select if completed MXB103 in first year) | | | |
| Year 2 Semester 2 | | | |
| MXB107 | Introduction to Statistical Modelling | | |
| Maths Core | Options Unit | | |
| Year 3 Semester 1 | | | |
| MXB201 | Advanced Linear Algebra | | |
| MXB241 | Probability and Stochastic Modelling 2 | | |
| OR | - | | |
| CAB201 | Programming Principles | | |
| Year 3 Sem | · · · | | |
| MXB202 | Advanced Calculus | | |
| MXB232 | Introduction to Operations Research | | |
| Year 4 Semester 1 | | | |
| MXB332 | Optimisation Modelling | | |
| MXB341 | Statistical Inference | | |
| OR | | | |
| MXB351 | Coding Theory and Graph Theory | | |
| Year 4 Sem | - | | |
| MXB334 | Operations Research for Stochastic Processes | | |
| MXB335 | Advanced Optimisation Modelling | | |

** Only TWO (2) Option units may be taken in these 4 unit-slots.

Semesters

- Statistical Science Major unit set:
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2 Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- <u>NOTE:</u>

| Code | Title | |
|--|---|--|
| | cience Major unit set: | |
| Year 1 Sem | ester 1 | |
| MXB102 | Abstract Mathematical Reasoning | |
| Maths Core Options Unit** | | |
| OR | | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| OR | | |
| MXB103 | Introductory Computational Mathematics | |
| Year 1 Sem | ester 2 | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| (PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors) | | |
| Year 2 Sem | ester 1 | |
| | | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| OR Maths C | | |
| OR Maths C | Modelling 1 Core Options Unit** (select if | |
| OR Maths C completed M MXB103 OR Maths C | Modelling 1 Core Options Unit** (select if MXB101 in first year) Introductory Computational | |
| OR Maths C completed M MXB103 OR Maths C | Modelling 1 Core Options Unit** (select if MXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if MXB103 in first year) | |
| OR Maths C completed M MXB103 OR Maths C completed M | Modelling 1 Core Options Unit** (select if MXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if MXB103 in first year) | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 | Modelling 1 Core Options Unit** (select if MXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if MXB103 in first year) ester 2 Introduction to Statistical | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 | Modelling 1 Core Options Unit** (select if MXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if MXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core | Modelling 1 Core Options Unit** (select if MXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if MXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core Year 3 Sem | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** ester 1 | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core Year 3 Sem MXB201 | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** ester 1 Advanced Linear Algebra Regression and Design | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core Year 3 Sem MXB201 MXB201 | Modelling 1 Core Options Unit** (select if MXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if MXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** ester 1 Advanced Linear Algebra Regression and Design ester 2 Advanced Calculus | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core Year 3 Sem MXB201 MXB242 Year 3 Sem | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** ester 1 Advanced Linear Algebra Regression and Design ester 2 | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core Year 3 Sem MXB201 MXB242 Year 3 Sem MXB202 | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** ester 1 Advanced Linear Algebra Regression and Design ester 2 Advanced Calculus Probability and Stochastic Modelling 2 | |
| OR Maths C completed N MXB103 OR Maths C completed N Year 2 Sem MXB107 Maths Core Year 3 Sem MXB201 MXB201 MXB242 Year 3 Sem MXB202 MXB241 | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** ester 1 Advanced Linear Algebra Regression and Design ester 2 Advanced Calculus Probability and Stochastic Modelling 2 | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=IX30&courseID=32805. CRICOS No.00213J

NOTE:

QU

| Year 4 Semester 2 | |
|--|---------------------------|
| MXB343 | Modelling Dependent Data |
| MXB344 | Generalised Linear Models |
| NOTE: | |
| ** Only TWO (2) Option units may be taken in these 4 unit-slots. | |



| Year | 2018 |
|---------------------------------|--|
| QUT code | IX37 |
| CRICOS | 059601K |
| Duration (full-time) | 4 years |
| OP | 7 |
| Rank | 87 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Director of Studies, QUT Business School; email: bus@qut.edu.au; SEF Associate Professor Tim Moroney(Mathematics); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Associate Prof Belinda Luke (Accountancy); Dr Louise Kelly (Advertising); Dr Radhika Lahiri (Economics); Dr Mark Doolan (Finance); Dr Ali Muhammad (Human Resource Management); Dr Shane Mathews (International Business); Dr Kavoos Mohannak (Management); Prof Larry Neale (Marketing); and Dr Anne Lane (Public Relations) Business: Student Services - (07) 3138 2050 Business: Student Services - bus@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (English (4, SA) and Maths B (4, SA)).

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies (English (4, SA) and Maths B (4, SA)). Accountancy, Finance, Economics and Marketing majors also require 4 SA in Maths A, B or C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Update

As of 2014, this course will only be available for IX37 continuing students. IX37 has been replaced by <u>IX30 Bachelor</u> of Business/Bachelor of Mathematics

Professional Recognition

Both degrees allow you to satisfy the requirements of membership of the relevant professional body for your chosen majors. Please refer to the relevant pages in this prospectus for details on the Bachelor of Mathematics and the QUT Business School prospectus for more information on business majors or visit www.qut.edu.au/study

Financial Support

You should consider applying for an industry-sponsored mathematics bursary or a business scholarship to help you financially throughout your studies. For further information visit Scholarships.

Course Design

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Mathematics program and 192 credit points from the Bachelor of Business program.

Business component:

Commencing students from 2009 onwards

8 Business School Core units (96 credit points) including MGB223 (see below)*
8 Major Core units (96 credit points)

2007-2008 commencing students • 7 Business School Core units (84 credit points)*

• 9 Major Core units (108 credit points)

*Please note that BSB123 Data Analysis (one of the Business School Core Units) is not required as the content of MAB313 Mathematics of Finance covers similar topics. MGB223 Entrepreneurship and Innovation replaces BSB123.

*Accounting major students complete 6 Business Core Units and 10 Accountancy major units to allow them to complete professional requirements.

* Please note that EFB101 Data Analysis for Business which is normally undertaken in the Majors of Accountancy, Banking & Finance and Economics, is not required as the content will be covered in the statistics units from the mathematics component of the program.

Important Information for Business Students

QUT Business School rules and procedures are outlined in the <u>Business</u> <u>Undergraduate Guidelines</u>.

Other useful information can be found on the <u>Student Services</u> website.

Domestic Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Mathematics program and 192 credit points from the Bachelor of Business program.

Business component:

- Eight Business School core units (96 credit points) including MGB223 (see below)*
- Eight major units (96 credit points)

*Please note that BSB123 Data Analysis (one of the Business School core units) is not required as the content of MAB313



Bachelor of Business/Bachelor of Mathematics

Mathematics of Finance covers similar topics. MGB223 Entrepreneurship and Innovation replaces BSB123.

*Accounting major students complete 6 Business core units and 10 Accountancy major units to allow them to complete professional requirements.

International Course structure Course Design

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Mathematics program and 192 credit points from the Bachelor of Business program.

Business component:

- 8 Business School Core units (96 credit points) including MGB223 (see below)*
- 8 Major Core units (96 credit points)

*Please note that BSB123 Data Analysis (one of the Business School Core Units) is not required as the content of MAB313 Mathematics of Finance covers similar topics. MGB223 Entrepreneurship and Innovation replaces BSB123.

*Accounting major students complete 6 Business Core Units and 10 Accountancy major units to allow them to complete professional requirements.

Sample Structure

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
 Year 3 Semester 2
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2

| Code | Title |
|---------------------------|---------|
| Year 1 Semester 1 | |
| Business School Core Unit | |
| Business School Core Unit | |
| Mathematics Unit | |
| Mathematics Unit | |
| Year 1 Semester 2 | |
| Business School Core Unit | |
| Business School Core Unit | |
| Mathematics Unit | |
| Mathematics Unit | |
| Year 2 Semester 1 | |
| Business School Co | re Unit |
| Business School Co | re Unit |
| Mathematics Unit | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=IX37&courseID=33553. CRICOS No.00213J

| Year 2 Semester 2 Business School Core Unit Business School Major Unit Mathematics Unit Year 3 Semester 1 Business School Major Unit |
|---|
| Business School Major Unit Mathematics Unit Mathematics Unit Year 3 Semester 1 |
| Mathematics Unit Mathematics Unit Year 3 Semester 1 |
| Mathematics Unit Year 3 Semester 1 |
| Year 3 Semester 1 |
| |
| Business School Major Unit |
| |
| Business School Major Unit |
| Mathematics Unit |
| Mathematics Unit |
| Year 3 Semester 2 |
| Business School Major Unit |
| Business School Major Unit |
| Mathematics Unit |
| Mathematics Unit |
| Year 4 Semester 1 |
| Business School Major Unit |
| Business School Major Unit |
| Mathematics Unit |
| Mathematics Unit |
| Year 4 Semester 2 |
| Business School Major Unit |
| Business School Major Unit |
| Mathematics Unit |
| Mathematics Unit |



| Year | 2018 |
|---------------------------|---|
| QUT code | IX54 |
| CRICOS | 006384G |
| Duration (full-time) | 5 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 480 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Jacob Coetzee (Engineering), SEF Enquiry (Information Technology); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Entry requirements

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator.

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (English (4,SA) and Maths B (4,SA)). Recommended study: Chemistry, Maths C and Physics.

International Entry requirements

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies (English (4,SA) and Maths B (4,SA)). Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Update

This course will be offered in 2014, however the course structure is being redeveloped and is subject to university approval.

For course updates please visit www.qut.edu.au/coursechanges

Professional Recognition

This course meets the requirements for membership of Engineers Australia (EA). EA is a signatory to the Washington Accord, which permits graduates from accredited member courses to work in various countries across the world. This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Other Course Requirements

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator.

Cooperative Education Program

IT's Cooperative Education Program gives you the opportunity of 10-12 months paid industry placement during your course where you can integrate real experience with what you're learning in your degree. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the <u>Cooperative</u> <u>Education Program.</u>

Pathways to Further Studies

Students who graduate with an Honours degree in Engineering will be eligible to apply for entry to postgraduate research degrees in appropriate disciplines.

Students who complete a BIT degree (or double degree) with a grade point average equal to, or greater than 5 (7 point scale) and who have decided against enrolling in an Honours program, could undertake this course. In addition, students may wish to enrol in the redesigned postgraduate coursework Masters which has specialisations allowing students to either extend their area of interest or specialise in other areas at the Masters level.

Domestic Course structure

Students are required to complete 480 credit points comprising studies from the Bachelor of Engineering (Electrical) program and the Bachelor of Information Technology.

Other Course Requirements

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering



Bachelor of Engineering (Electrical)/Bachelor of Information Technology

environment approved by the course coordinator.

Students supplement the electrical engineering component of this program with core units in the Bachelor of IT program ;

- Six (6) IT Core units (72 credit points - 48cp + 24cp Core options)

- Ten (10) IT Major Core units (120 credit points)

International Course structure

Course Design

Students are required to complete 480 credit points comprising studies from the Bachelor of Engineering (Electrical) program and the Bachelor of Information Technology.

Other Course Requirements

Bachelor of Engineering students are required to complete at least 60 days of industrial experience in an engineering environment approved by the course coordinator.

Students supplement the electrical engineering component of this program with core units in the Bachelor of IT program ;

- Six (6) IT Core units (72 credit points - 48cp + 24cp Core options)

- Ten (10) IT Major Core units (120 credit points)

Sample Structure Course Updates

A number of changes have been made to Science and Engineering Faculty courses. From 2015, units in the Engineering component of IX54 will progressively be recoded, renamed or discontinued (for students who commenced the course prior to 2015). To see how these changes affect you, please consult Engineering unit replacement table below in conjunction with the course structure. Affected Study Plans are being amended to reflect the changes. Please contact the Faculty if you have any concerns.

Engineering Unit Replacement Table

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1

- Year 2 Semester 2
- Year 3 Semester 1
 Year 3 Semester 2
- Year 3 Semester 2
 Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2
- Electrical Engineering Selectives

| Code | Title | |
|--|--|--|
| Year 1 Semester 1 | | |
| IFB101 | Impact of IT | |
| [INB101 repla | aced by IFB101 in 2014] | |
| IFB102 | Computer Technology Fundamentals | |
| [INB102 repla | aced by IFB102 in 2014] | |
| IFB103 | Designing for IT | |
| [INB103 repla | aced by IFB103 in 2014] | |
| MZB125 | Introductory Engineering Mathematics | |
| [MAB125 rep | laced by MZB125 in 2015] | |
| OR | | |
| MXB106 | Linear Algebra and Differential Equations | |
| | laced by MZB126 for SEM- | |
| 1 2015 only. from SEM-2 of | To be replaced by MXB106 | |
| | - | |
| Year 1 Seme | Ster 2 Foundations of Electrical | |
| EGB120 | Engineering | |
| | laced by EGB120 in 2015] | |
| IFB104 | Building IT Systems | |
| [INB104 repla | aced by IFB104 in 2014] | |
| MXB106 | Linear Algebra and Differential Equations | |
| [MAB126 replaced by MZB126 for SEM- 1 2015 only. To be replaced by MXB106 from SEM-2 onwards.] | | |
| MXB105 | Calculus of One and Two Variables | |
| [MAB127 rep 2015] | laced by MXB105 in SEM-2 | |
| IT Major Unit | | |
| Year 2 Seme | ster 1 | |
| EGB113 | Energy in Engineering Systems | |
| [ENB130 rep | laced by EGB113 in 2015] | |
| EGB348 | Electronics | |
| [ENB240 replaced by EGB348 in 2017. EGB348 is a SEM-2 unit.] | | |
| MXB107 | Introduction to Statistical Modelling | |
| [MAB233 replaced by MXB107 in Sem-2 2015] | | |
| EGB241 | Electromagnetics and Machines | |
| OR | | |
| ELEC-OPTIONS | | |
| [ENB250 replaced by EGB241 or ELEC- | | |

OPTIONS (if both ENB250 and ENB343 onplan) in 2016.] Year 2 Semester 2 **Engineering Mechanics** EGB121 [ENB110 replaced by EGB121 in SEM-2 2015] **Engineering Unit Option** [Engineering Unit Option replaces ENB200 in 2015. See Engineering Unit Option List] **EGB242** Signal Analysis [ENB242 replaced by EGB242 in 2016] **ENB205-OPTIONS** OR **ELEC-OPTIONS** [[ENB243 replaced by ENB205 or ELEC-OPTIONS (if both ENB242 and ENB243 on plan) in 2016. ENB205 replaced by ENB205-OPTIONS in 2017.] Year 3 Semester 1 Foundation of Engineering **EGB111** Design [ENB150 replaced by EGB111 in 2015] **MZB126 Engineering Computation** [ENB246 replaced by MZB126 in 2017] EGB240 Electronic Design [ENB245 replaced by EGB240 in 2016] IT Major Unit Year 3 Semester 2 IT Project Design and **IFB299** Development [INB201 replaced by IFB299 in 2015.] IT Major Unit IT Major Unit IT Major Unit Year 4 Semester 1 Control and Dynamic **EGB345** Systems [ENB301 replaced by EGB345 in 2016. EGB345 is a SEM-2 unit.] Energy Supply and EGB341 Delivery [ENB340 replaced by EGB341 in 2017. EGB341 is a SEM-2 unit.] Telecommunications and EGB342 Signal Processing [ENB342 replaced by EGB342 in 2017. EGB342 is a SEM-2 unit.] **IT Major Unit** Year 4 Semester 2 **ENB344** Industrial Electronics **Design and Practice FGB340** [ENB345 replaced by EGB340 in 2017. EGB340 is a SEM-1 unit.] Introduction to Statistical **MXB107** Modelling



Bachelor of Engineering (Electrical)/Bachelor of Information Technology

| [MAB233 replaced by MXB107 in Sem-2 2015] | | |
|--|--|--|
| | Engineering Selective | |
| IT Major/Core | • | |
| Year 5 Seme | | |
| ELECIT-OPT | | |
| [ENB346 rep in 2017] | laced by ELECIT-OPTION1 | |
| IFB398 | Capstone Project (Phase 1) | |
| [CAB398/IAB IFB398 in 20 | 398 option replaced by 17] | |
| IT Major/Core | e Option | |
| Electrical Eng | gineering Selective | |
| Year 5 Seme | ster 2 | |
| BEB801 | Project 1 | |
| SEB701 | Work Integrated Learning 1 | |
| IFB399 | Capstone Project (Phase 2) | |
| [CAB399/IAB IFB399 in 20 | 399 option replaced by [17] | |
| IT Major Unit | | |
| Electrical Eng | gineering Selectives | |
| MXB106 | Linear Algebra and Differential Equations | |
| | B106 must be selected elected previously.] | |
| CAB201 | Programming Principles | |
| [ENB241 rep | laced by CAB201 in 2017] | |
| EGB339 | Introduction to Robotics | |
| [ENB399 rep | laced by EGB339 in 2016] | |
| EGH444 | Digital Signals and Image Processing | |
| [ENB448 rep | laced by EGH444 in 2017] | |
| EGH440 | Power Systems Analysis | |
| [ENB452 replaced by EGH440 in 2017] | | |
| ENB453 | Power Equipment and Utilisation | |
| ENB456 | Energy | |
| EGH446 | Autonomous Systems | |
| [ENB457 replaced by EGH446 in 2017] | | |
| EGH445 Modern Control | | |
| [ENB458 replaced by EGH445 in 2017] | | |
| The following units have been discontinued, but will count as a selective: | | |
| ENB441 Applied Image Processing (disc | | |
| 31/12/2015) | | |

| Unit List | |
|-----------|-------------------------------------|
| Code | Title |
| CAB201 | Programming Principles |
| CAB202 | Microprocessors and Digital Systems |
| CAB203 | Discrete Structures |

| CAB301 | Algorithms and Complexity | |
|-------------------|---|--|
| CAB302 | Software Development | |
| CAB303 | Networks | |
| IFB299 | IT Project Design and Development | |
| IFB398 | Capstone Project (Phase 1) | |
| IFB399 | Capstone Project (Phase 2) | |
| Select 12cp from: | | |
| CAB401 | High Performance and Parallel Computing | |
| CAB402 | Programming Paradigms | |
| CAB403 | Systems Programming | |

| Unit List | | |
|-------------------|--|--|
| Code | Title | |
| IAB201 | Modelling Information Systems | |
| IAB202 | Business of Information Technology | |
| IAB203 | Business Process Modelling | |
| IAB204 | Business Analysis | |
| IAB205 | Corporate Systems | |
| IFB299 | IT Project Design and Development | |
| IAB301 | Enterprise Architecture | |
| IFB398 | Capstone Project (Phase 1) | |
| IFB399 | Capstone Project (Phase 2) | |
| Select 12cp from: | | |
| IAB302 | Information Systems Consulting | |
| IAB303 | Business Intelligence | |
| IAB304 | Project Management | |



QUT

Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | IX56 |
| CRICOS | 059227E |
| Duration (full-time) | 4 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point, Kelvin Grove |
| Domestic fee (indicative) | 2018: CSP \$8,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,400 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Sophie McIntyre (Creative Industries); SEF Enquiry (Information Technology); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | +61 7 3138 2000 askqut@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

This double degree allows you to complement your technical skills with creative skills through digital media and film production. You will learn to merge the creative and imaginative with the technical to develop sophisticated and innovative digital products. You can choose to complement your skill set through a range of information technology and creative industries areas of interest to diversify your studies, including:

- animation
- art and design history
- creative and professional writing
- dance studies
- digital media
- entertainment industries
- entrepreneurship
- fashion communication
- film, television and screen game design
- interactive and visual design
 - journalism, media and communication
 - literary studies
 - music
 - online environments

Career Outcomes

As a graduate you can enjoy the more creative side of information technology careers including digital media programmer, simulation designer or developer, games producer or designer, sound designer, mobile entertainment and communications developer, user interface developer, knowledge worker in music and sound, web developer and digital product strategist.

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Course Design

You will undertake the Bachelor of Creative Industries core units as well as one creative industries major. Your information technology degree component comprises eight core units, four breadth units, and four units in your information technology specialisation.

Study Areas

The Bachelor of Information Technology has majors in Information Systems and Computer Science which will be shown on the a graduate's parchment.

Pathways to Further Studies

On successful completion of this course, you will be eligible to apply for entry into the Bachelor of Creative Industries (Honours), provided you have met entry requirements.

The QUT Bachelor of Information Technology is located at Level 7 of the Australian Qualifications Framework (AQF). Eligible graduates may continue their studies in this discipline with an additional honours year in (IN10) Bachelor of Information Technology (Honours).

Work Integrated Learning

The Faculty's Work Integrated Learning Minor gives you the opportunity of industry placement during your course where you can integrate real experience with what you're learning in your degree. Companies that QUT's students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNiTAB, RACQ and many Queensland Government departments.



Unit

Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:

Undergraduate Translation Table

If you have completed the unit(s) listed under the "Translation Unit Codes" column, you are not permitted to enrol in the listed new code.

Domestic Course structure

You will undertake the Bachelor of Creative Industries core units (96 credit points) as well as 96 credit points from a creative industries major.

The Bachelor of Information Technology degree comprises of:

- 72 credit points (6 units) of information technology core units, which includes 24 credit points (2 units) of option units* selected from an approved list
- 120 credit points (10 units) of major core units (Information Systems or Computer Science).

Study overseas

Study overseas while earning credit towards your QUT creative industries degree with one of our worldwide exchange partners.

Overseas study can be for one or two semesters (or during the semester break) and the units you take can be in a creative or non-creative discipline area, depending on how they match with your QUT course.

International Course structure

You will undertake the Bachelor of Creative Industries 96cp core units as well as 96cp from a creative industries major.

The Bachelor of Information Technology degree comprises of ;

- 72 credit points (6 units) of Information Technology Core units, which includes 24 credit points (2 units) of Option Units* selected from an approved list.
- 120 credit points (10 units) of Major Core units (Information Systems or Computer Science).

Study overseas

Study overseas while earning credit towards your QUT creative industries degree with one of our worldwide exchange partners.

Overseas study can be for one or two

semesters (or during the semester break) and the units you take can be in a creative or non-creative discipline area, depending on how they match with your QUT course.

Sample Structure Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- . Year 2, Semester 1 Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2 .
- . Year 4, Semester 1
- Year 4, Semester 2 .

Code Title

Year 1, Semester 1

IT Core Unit

IT Core Unit

Creative Industries: People KKB101 and Practices

Creative Industries Major: First Unit

Year 1, Semester 2

IT Core Unit

IT Core Unit

Creative Industries: Making KKB102 Connections

Creative Industries Major: Second Unit

Note: Students considering studying overseas in Year 2 Semester 2 must apply by 1 November.

Year 2, Semester 1

IT Core Unit Option

IT Core Unit Option

A unit from the Level 1 Unit Options (either DXB102 or KPB101 or KVB104):

| KPB101 Introduction to Screen Production | DXB102 | Visual Communication | |
|---|--------|----------------------|--|
| | KPB101 | | |

KVB104 Photo Media and Art Practice Creative Industries Major: Third Unit

Note for students intending to complete KYB201 Socially Engaged Arts Practice as the 'Level 2 Unit Option' - you should enrol in KYB201 in Year 2 Semester 1 instead of your Creative Industries Major: Third Unit. You will undertake your Creative Industries Major: Third Unit in Year 2 Semester 2.

Year 2, Semester 2

IT Major Unit

IT Major Unit

A unit from the Level 2 Unit Options (either KYB201 or KXB202):

| KYB201 | Socially Engaged Arts Practice |
|--------|-----------------------------------|
| KXB202 | Project Management for |

Entertainment

Creative Industries Major: Fourth Unit

Note: KTB211 Creative Industries Events and Festivals is permitted to count as a 'Level 2 Unit Option' if completed in 2017 or earlier.

Note for students intending to complete KYB201 Socially Engaged Arts Practice as the 'Level 2 Unit Option' - you should enrol in KYB201 in Year 2 Semester 1 instead of your Creative Industries Maior: Third Unit. You will undertake your Creative Industries Major: Third Unit in Year 2 Semester 2.

Year 3, Semester 1

IT Major Unit

IT Major Unit

Creative Industries Major: Fifth Unit

A unit from the Creative Industries University Wide or Work Integrated Learning Unit Options lists

Year 3, Semester 2

IT Major Unit

IT Major Unit

Creative Industries Major: Sixth Unit

A unit from the Creative Industries University Wide or Work Integrated Learning Unit Options lists

Year 4, Semester 1

IT Major Unit

IT Major Unit

Creative Industries Major: Seventh Unit

A unit from the Creative Industries Work Integrated Learning Unit Options

Year 4, Semester 2

IT Major Unit

IT Major Unit

Creative Industries Major: Eighth Unit

A unit from the Creative Industries Work Integrated Learning Unit Options

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1 Year 2, Semester 2 .
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 Year 4, Semester 2

| Code | Title |
|--------------------|--|
| Year 1, Semester 1 | |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| Year 1, Semester 2 | |
| IFB104 | Building IT Systems |
| IFB130 | Database |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.gut.edu.au/enrolment/courses/course?courseCode=IX56&courseID=32816. CRICOS No.00213J



| | Management |
|--------------------|---|
| Year 2, Semester | 1 |
| IFB103 | Designing for IT |
| IT Core Unit Optio | 'n |
| Year 2, Semester | 2 |
| CAB201 | Programming Principles |
| CAB202 | Microprocessors and Digital Systems |
| Year 3, Semester | 1 |
| CAB203 | Discrete Structures |
| CAB302 | Software Development |
| Year 3, Semester | 2 |
| CAB303 | Networks |
| IFB299 | IT Project Design and Development |
| Year 4, Semester | 1 |
| CAB301 | Algorithms and Complexity |
| IFB398 | Capstone Project (Phase 1) |
| Year 4, Semester | 2 |
| IFB399 | Capstone Project (Phase 2) |
| Select one of: | |
| CAB401 | High Performance and Parallel Computing |
| CAB402 | Programming Paradigms |
| CAB403 | Systems Programming |

Semesters

Code

- Year 1, Semester 1
 Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2 ٠ .
- Year 4, Semester 1 •
- Year 4, Semester 2

| Code | TITLE |
|---------------------|--|
| Year 1, Semester 1 | |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| Year 1, Semester 2 | |
| IFB104 | Building IT Systems |
| IFB130 | Database Management |
| Year 2, Semester 1 | |
| IFB103 | Designing for IT |
| IT Core Unit Option | |
| Year 2, Semester 2 | |
| IAB201 | Modelling |

Titlo

| | Information Systems |
|------------------------------|--|
| IAB202 | Business of Information Technology |
| Year 3, Semester 1 | |
| IAB203 | Business Process Modelling |
| IAB204 | Business Analysis |
| Year 3, Semester 2 | |
| IAB205 | Corporate Systems |
| IFB299 | IT Project Design and Development |
| Year 4, Semester 1 | |
| IFB398 | Capstone Project (Phase 1) |
| Select one of: | |
| IAB302 | Information Systems Consulting |
| IAB303 | Business Intelligence |
| | |
| IAB304 | Project Management |
| IAB304 Year 4, Semester 2 | , |
| | , |

Semesters

| <u>Semester 1 (February)</u> |
|--|
| <u>commencements</u> |
| Year 1, Semester 1 |
| Year 1, Semester 2 |
| Year 2, Semester 1 |
| Year 2, Semester 2 |
| Year 3 Semester 1 |

- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Semester 2 (July) commencements
- Year 1, Semester 2
- Year 2, Semester 1
 Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
 Year 4, Semester 2
 Year 5, Semester 1

| Code | Title | |
|-------------------------------------|--|--|
| Semester 1 (February) commencements | | |
| Year 1, Semester 1 | | |
| IFB101 | Impact of IT | |
| IFB102 | Computer Technology Fundamentals | |
| Year 1, Semester 2 | | |
| IFB104 | Building IT Systems | |
| IFB130 | Database Management | |
| Year 2, Semester 1 | | |

| IFB103 | Designing for IT |
|--------------------|---|
| IT Core Unit Optic | |
| Year 2, Semester | |
| CAB201 | Programming Principles |
| CAB202 | Microprocessors and Digital Systems |
| Year 3, Semester | 1 |
| CAB203 | Discrete Structures |
| CAB302 | Software Development |
| Year 3, Semester | 2 |
| CAB303 | Networks |
| IFB299 | IT Project Design and Development |
| Year 4, Semester | 1 |
| CAB301 | Algorithms and Complexity |
| IFB398 | Capstone Project (Phase 1) |
| Year 4, Semester | 2 |
| IFB399 | Capstone Project (Phase 2) |
| Select one of: | |
| CAB401 | High Performance and Parallel Computing |
| CAB402 | Programming Paradigms |
| CAB403 | Systems Programming |
| Semester 2 (July) | commencements |
| Year 1, Semester | 2 |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| Year 2, Semester | 1 |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| Year 2, Semester | |
| CAB201 | Programming Principles |
| IFB130 | Database Management |
| Year 3, Semester | |
| CAB202 | Microprocessors and Digital Systems |
| CAB203 | Discrete Structures |
| Year 3, Semester | |
| CAB303 | Networks |
| IFB299 | IT Project Design and Development |
| Year 4, Semester | |
| CAB301 | Algorithms and Complexity |
| CAB302 | Software |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=IX56&courseID=32816. CRICOS No.00213J



| | Development |
|---------------------|-------------------------------|
| Year 4, Semester 2 | |
| IFB398 | Capstone Project (Phase 1) |
| Select ONE of: | |
| CAB403 | Systems Programming |
| IT Core Unit Option | |
| Year 5, Semester 1 | |
| | |

| IFB399 | Capstone Project (Phase 2) |
|----------------|---|
| Select ONE of: | |
| CAB401 | High Performance and Parallel Computing |
| CAB402 | Programming Paradigms |

IT Core Unit Option

(IT Core Option can only be selected once.)

Instructions

Refer to the **Course changes for 2018** section above for information regarding changes to available BCI majors.

Please refer to the following study sequences to plan your program. You must complete 96 credit points (normally eight 12 credit point subjects) from the specified units to achieve a major, following semester of offer and unit requisites (where applicable) to determine order of enrolment.

Any unit(s) that appear in these majors and/or minors and are also mandatory elsewhere in your course can not contribute towards the completion of these majors and/or minors.

Any unit(s) that appear in multiple majors and/or minors can only contribute towards the completion of one of these majors or minors.

In this list

- <u>Animation (KKBXMJR-ANIMATN)</u>
- <u>Art and Design History (KKBXMJR-ARTHIST)</u>
- Creative and Professional Writing (KKBXMJR-CRPRFWG)
- Dance Studies (KKBXMJR-DANCEST)
- Drama (KKBXMJR-DRAMA)
 Entertainment Industries
- <u>Entertainment Industries</u> (KKBXMJR-ENTINDS)
- Fashion Communication (KKBXMJR-FASHION) (previously Fashion)
- Film, Television and Screen (KKBXMJR-FLMTVSC version 3)
- Film, Television and Screen (KKBXMJR-FLMTVSC version 2): discontinued end 2014

- Interactive and Visual Design (KKBXMJR-INVISDN)
- Journalism (KKBXMJR-JOURNAL)
 Literary Studies (KKBXMJR-LITSTD)
- <u>Media and Communication</u> (KKBXMJR-MEDIACM)
- Music (KKBXMJR-MUSIC)

Animation (KKBXMJR-ANIMATN)

*Description: This major provides you with important skills in the skills, principles, concepts and history of animation. Beginning with drawing for animation and an exploration of the history of the animation industry and its practices, you will then apply this knowledge to current and emerging fields within the animation industry including motion graphics, 3D modelling and animation, real-time 3D and character animation. Through the creation of an interactive virtual environment you will be given the opportunity to refine your skills and expand your knowledge of the 3D animation industry.

*Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this major.

It is recommended that you review the requisite requirements for units to ensure your unit selection enables you to successfully complete the requirements of this major. KNB127, KNB135 and KNB137 are highly recommended to be undertaken as first year units as they are requisites for many advanced units.

48cp from the Introductory Animation Unit Options

KNB125 Animation History and Context

- KNB126 Motion Design
- KNB127 CGI Foundations
- KNB135 Animation Aesthetics
- KNB136 Visual Storytelling: Production Design
- KNB137 Digital Worlds
- 48cp from the Advanced Animation Unit Options
- KNB215 Animation Performance Visual Storytelling: Cinematic
- KNB216 Pre-Visualisation KNB217 Digital Creatures
- KNB225 Advanced Animation Performance
- KNB226 Visual Storytelling: Animation Pre-Production
- KNB227 CGI Technologies

*Note: KPB109 is permitted to count towards the Introductory Animation Unit

Options if completed in 2017 or earlier. *Note: KNB221, KNB311 and KNB313 are permitted to count towards the Advanced Animation Unit Options if completed in 2017 or earlier.

*Note: KNB212 will count as an Advanced Animation Unit Option. Its equivalent, KNB137, will count as an Introductory Animation Unit Option.

Art and Design History (KKBXMJR-ARTHIST)

Code Title

*Description: This major equips you with the educational base necessary for a career in the arts professions, such as curatorial work, art criticism and arts administration. It offers a coherent and sequential set of units that provide a platform for a research-based study of the visual arts, design and architecture. In conjunction with further study, this major will assist in preparing you for work as a professional in these disciplines.

*Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this major.

96cp from the Art and Design History Unit Options

| DAB103 | Architectural Visualisation 1 |
|---|----------------------------------|
| DAB220 | Architecture, Culture and Place |
| DAB325 | Architecture in the 20th Century |
| DEB202 | Introducing Design History |
| KVB102 | Modernism in Art |
| KVB113 | Australian Art and Identity |
| KVB216 | Post 1945 Art |
| KVB223 | Post 1989 Art |
| KVB307 | Theories of Spatial Culture |
| KVB308 | Video Art and Culture |
| *Note: KVB212, KVB215 and KVB304 are permitted to count towards this second major if completed in 2017 or earlier. | |
| *Note: It is expected that KVB307 Theories of Spatial Culture, and KVB308 Video Art and Culture will be offered for | |

Theories of Spatial Culture, and KVB308 Video Art and Culture will be offered for the final time in 2018. Students interested in these units are strongly encouraged to enrol in them in 2018.

Creative and Professional Writing (KKBXMJR-CRPRFWG)

Code Title

*Description: The aim of this major is to prepare students to graduate with adequate skills and knowledge in the area of creative and professional writing; to provide a thorough grounding in a



variety of genres that include fiction, creative non-fiction, media writing and corporate writing and editing, thereby equipping graduates with the versatility required of professional writers; to enhance the critical, analytical and peerreviewing skills of students; to provide an understanding of creative writing in its social and generic contexts.

*Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this major.

48cp from the Introductory Creative and Professional Writing Unit Options

| KPB116 | Introduction to Screenwriting |
|------------|-------------------------------------|
| KWB10 4 | Writing the Short Story |
| KWB11 2 | Youth and Children's Writing |
| KWB11 3 | Introduction to Creative Writing |
| KWB11 5 | Persuasive Writing |
| KWB11 6 | Creative Non-Fiction |

48cp from the Advanced Creative and Professional Writing Unit Options

| KWB20 7 | Great Books: Creative Writing Classics |
|------------|---|
| KWB21 1 | Creative Writing: Style and Technique |
| KWB21 3 | Corporate Writing and Editing |
| KWB21 4 | The Artful Life: From Memoir to Fiction |
| KWB30 3 | Writing and Publishing Industry |

*Note: It is expected that KWB207 Great Books: Creative Writing Classics and KWB112 Youth and Children's Writing will be offered for the final time in 2018. Students interested in these units are strongly encouraged to enrol in them in 2018.

Dance Studies (KKBXMJR-DANCEST) Code Title

*Description: This major aims to provide a broad grounding in practical and theoretical aspects of dance. You will gain skills in contemporary dance, ballet, commercially driven genres, choreography and critical thinking and writing together with an understanding of the social and historical context of ballet, contemporary dance, and popular and

*Assumed Knowledge: Previously acquired knowledge or skill IS required for you to undertake this major. For health and safety reasons, admission to

this major is dependent upon an

appropriate level of physical fitness to prevent injury, and having no preexisting injuries or structural/physical issues that would prevent your safe and full participation in all physical activities within its practical units. You may be required to confirm your fitness to attempt this major. If so, you must obtain a physiotherapist's report and have it approved by the Dance Study Area Coordinator before you will be permitted to enrol in this major.

48cp from the Introductory Dance Unit Options

| KDB107 | Foundations in Improvisation and Choreographic Practice |
|--|--|
| KDB113 | Dance Studies |
| KDB122 | Popular Dance Styles |
| KDB123 | Dance Legacies |
| 48cp from the Advanced Dance Unit Options | |
| KDB206 | Dance in Contemporary Culture |
| KDB210 | Dance Composition |
| KDB222 | World Dance |
| KYB201 | Socially Engaged Arts Practice |
| *Note: KDB105, KDB108, KDB109 and KDB120 are permitted to count towards the latenductory Danage Unit Optional if | |

*Note: KDB105, KDB108, KDB109 and KDB120 are permitted to count towards the Introductory Dance Unit Options if completed in 2017 or earlier.

*Note: KDB204, KDB205, KDB225 and KDB231 are permitted to count towards the Advanced Dance Unit Options if completed in 2017 or earlier.

Drama (KKBXMJR-DRAMA) Code Title

*Description: The major offers a balance of performance theory and practice. It is designed as a learning sequence, beginning with introductory concepts and practices, through intermediate and on to advanced learning. Underpinning the major is a twin focus on contemporary performance-making and events management. Both of these areas are balanced by studies in theatre history and theory. Core topics include acting; directing; twentieth-century performance theory and practice; and events management.

*Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this major. 48cp from the Introductory Drama Unit Options

| KTB110 | Plays that Changed the World |
|--------|------------------------------|
| | |

- KTB111 The Authentic Performer
- KTB120 Gaps and Silences in Theatre Practice
- KTB121 The Responsive Performer

| 48cp from the Advanced Drama Unit |
|-----------------------------------|
| Options |

| KTB217 | Story and Performance |
|--------|---------------------------------------|
| KTB225 | Radical Theatre Forms |
| KTB227 | Leadership Dynamics in Performance |

KYB201 Socially Engaged Arts Practice

*Note: KTB102, KTB104 and KSB106 are permitted to count towards the Introductory Drama Unit Options if completed in 2017 or earlier.

*Note: KDB225, KTB210, KTB211, KTB215 and KTB305 are permitted to count towards the Advanced Drama Unit Options if completed in 2017 or earlier.

Entertainment Industries (KKBXMJR-ENTINDS)

Code Title

*Description: On completion of this major, you will be able to demonstrate the knowledge and skills required to pursue a career in the Entertainment Industry. These include an understanding of the characteristics of mainstream commercial culture that appeal to large audiences; an understanding both of business and creative processes; an ability to balance the two of these; and an awareness of historical and current Entertainment content and business.

*Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this major.

Either BSB126 or KPB116 from the 'Entertainment Industries Unit Options List'. BSB126 is mandatory unless you are already undertaking it as part of another study package.

| BSB126 | Marketing | |
|--------------------------------------|---|--|
| KPB116 | Introduction to Screenwriting | |
| Entertainment Industries Core Units: | | |
| AMB20 7 | Entertainment Marketing | |
| KXB101 | Introduction to Entertainment | |
| KXB102 | Global Entertainment | |
| KXB201 | Entertainment Practice: Balancing Creativity and Business | |
| KXB301 | Entertainment Industries Studio | |
| LWS00 8 | Entertainment Law | |
| Either LWS009 or KXB202 from the | | |

Either LWS009 of KXB202 from the 'Entertainment Industries Additional Unit Options List'. LWS009 is mandatory unless you meet the LWS008 prerequisite through another unit. LWS00

Introduction to Law

9



KXB202 Project Management for Entertainment

Fashion Communication (KKBXMJR-FASHION) (previously Fashion) Code Title

*Description: This major has been designed to offer a mix of theoretical and practical units to reflect the professional diversity of fashion careers, where communication is fundamental to the dissemination of fashion globally. The theory units will develop your knowledge and understanding of the history, industry and consumption of fashion and how fashion is communicated, marketed and distributed through industry channels for production, and through branding, trends, styling and graphic/technical requirements. The practical units provide you with a variety of options to develop fashion communication related skills focusing on fashion graphics, product development and fashion journalism.

*Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this major.

*From 2015, this major's title has changed from 'Fashion Major' to 'Fashion Communication Major'. 48cp from the Introductory Fashion

Communication Unit Options

DFB102 Introduction to Fashion

| DFB203Sustainability: The Materiality of FashionDFB302Fashion VisualisationDFB303Unspeakable Beauty: A History of FashionDFB406Product Design and Development in the Fashion Industry48cp from the Advanced Fashion Communication Unit OptionsDFB404Fashion and Costume in FilmDFB405Fashion and Style JournalismDFB404Fashion and Style JournalismDFB502Ragtrade: The Business of FashionDFB602Critical Fashion Studies*Note: KFB108 is permitted to count towards the Introductory Fashion Unit Options if completed in 2014 or earlier.*Note: DFB406/KFB211 are permitted to count towards the Advanced Fashion Unit Options for students who commenced this major in 2014 or earlier. | DEDIOZ | introduction to Fashion | |
|---|---|------------------------------|--|
| DFB303Unspeakable Beauty: A History of FashionDFB406Product Design and Development in the Fashion Industry48cp from the Advanced Fashion Communication Unit OptionsDFB304Fashion and Costume in FilmDFB402Fashion Design: 1950 to NowDFB404Fashion and Style JournalismDFB502Ragtrade: The Business of FashionDFB602Critical Fashion Studies*Note: KFB108 is permitted to count towards the Introductory Fashion Unit Options if completed in 2014 or earlier.*Note: DFB406/KFB211 are permitted to count towards the Advanced Fashion Unit Options for students who commenced this major in 2014 or | DFB203 | | |
| DFB303History of FashionDFB406Product Design and Development in the Fashion Industry48cp from the Advanced Fashion Communication Unit OptionsDFB304Fashion and Costume in FilmDFB402Fashion Design: 1950 to NowDFB404Fashion and Style JournalismDFB502Ragtrade: The Business of FashionDFB602Critical Fashion Studies*Note: KFB108 is permitted to count towards the Introductory Fashion Unit Options if completed in 2014 or earlier.*Note: DFB406/KFB211 are permitted to count towards the Advanced Fashion Unit Options for students who commenced this major in 2014 or | DFB302 | Fashion Visualisation | |
| DFB406Development in the Fashion Industry48cp from the Advanced Fashion Communication Unit OptionsDFB304Fashion and Costume in FilmDFB402Fashion Design: 1950 to NowDFB404Fashion and Style JournalismDFB502Ragtrade: The Business of FashionDFB602Critical Fashion Studies*Note: KFB108 is permitted to count towards the Introductory Fashion Unit Options if completed in 2014 or earlier.*Note: DFB406/KFB211 are permitted to count towards the Advanced Fashion Unit Options for students who commenced this major in 2014 or | DFB303 | | |
| Communication Unit OptionsDFB304Fashion and Costume in FilmDFB402Fashion Design: 1950 to NowDFB404Fashion and Style JournalismDFB502Ragtrade: The Business of FashionDFB602Critical Fashion Studies*Note: KFB108 is permitted to count towards the Introductory Fashion Unit Options if completed in 2014 or earlier.*Note: DFB406/KFB211 are permitted to count towards the Advanced Fashion Unit Options for students who commenced this major in 2014 or | DFB406 | Development in the Fashion | |
| DFB402Fashion Design: 1950 to NowDFB404Fashion and Style JournalismDFB502Ragtrade: The Business of FashionDFB602Critical Fashion Studies*Note: KFB108 is permitted to count towards the Introductory Fashion Unit Options if completed in 2014 or earlier.*Note: DFB406/KFB211 are permitted to count towards the Advanced Fashion Unit Options for students who commenced this major in 2014 or | | | |
| DFB404Fashion and Style JournalismDFB502Ragtrade: The Business of FashionDFB602Critical Fashion Studies*Note: KFB108 is permitted to count towards the Introductory Fashion Unit Options if completed in 2014 or earlier.*Note: DFB406/KFB211 are permitted to count towards the Advanced Fashion Unit Options for students who commenced this major in 2014 or | DFB304 | Fashion and Costume in Film | |
| DFB502Ragtrade: The Business of FashionDFB602Critical Fashion Studies*Note: KFB108 is permitted to count towards the Introductory Fashion Unit Options if completed in 2014 or earlier.*Note: DFB406/KFB211 are permitted to count towards the Advanced Fashion Unit Options for students who commenced this major in 2014 or | DFB402 | Fashion Design: 1950 to Now | |
| DFB502 Fashion DFB602 Critical Fashion Studies *Note: KFB108 is permitted to count towards the Introductory Fashion Unit Options if completed in 2014 or earlier. *Note: DFB406/KFB211 are permitted to count towards the Advanced Fashion Unit Options for students who commenced this major in 2014 or | DFB404 | Fashion and Style Journalism | |
| *Note: KFB108 is permitted to count towards the Introductory Fashion Unit Options if completed in 2014 or earlier. *Note: DFB406/KFB211 are permitted to count towards the Advanced Fashion Unit Options for students who commenced this major in 2014 or | DFB502 | | |
| towards the Introductory Fashion Unit Options if completed in 2014 or earlier. *Note: DFB406/KFB211 are permitted to count towards the Advanced Fashion Unit Options for students who commenced this major in 2014 or | DFB602 | Critical Fashion Studies | |
| count towards the Advanced Fashion Unit Options for students who commenced this major in 2014 or | towards the Introductory Fashion Unit | | |
| | Unit Options for students who commenced this major in 2014 or | | |

Film, Television and Screen (KKBXMJR-FLMTVSC version 3) Code Title *Description: The aim of this major is to provide students with a range of understandings in the theory and practice of film, television and screen. This study area aims to enhance creative, technical and organisational abilities as well as building story telling and communication skills.

*Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this major. 96cp from the Film. Television and Screen Unit Options Introduction to Screen **KPB101** Production KPB113 Screen Text Analysis KPB116 Introduction to Screenwriting **Contemporary Screen KPB120** Histories KPB121 Screen Business KPB122 Screen Crafts: Narratives KPB208 Screen Genres Screen Content Production **KPB216** Management **KPB220** Factual Screens KPB315 Global Screen Studies *Note: KNB312 and KNB313 are permitted to count towards this second

major if completed in 2017 or earlier. *Note: KPB212, KPB303 and KPB313 are permitted to count towards this major if completed in 2014 or earlier.

Film, Television and Screen (KKBXMJR-FLMTVSC version 2): discontinued end 2014

Code Title

*Description: The aim of this major is to provide students with a range of understandings in the theory and practice of film, television and screen. This study area aims to enhance creative, technical and organisational abilities as well as building story telling and communication skills.

 *Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this major.
 48cp from the Introductory Film, Television and Screen Unit Options
 KPB101 Introduction to Screen Production
 KPB113 Screen Text Analysis
 KPB116 Introduction to Screenwriting
 KPB120 Contemporary Screen Histories
 KPB121 Screen Business
 KPB122 Screen Crafts: Narratives

48cp from the Advanced Film, Television and Screen Unit Options

KPB208 Screen Genres

KPB216 Screen Content Production Management

KPB220 Factual Screens

KPB315 Global Screen Studies

*Note: KNB312 and KNB313 are permitted to count towards this second major if completed in 2017 or earlier. *Note: KPB212, KPB303 and KPB313 are permitted to count towards this major if completed in 2014 or earlier. *Note: KPB112 (equivalent to KPB208) counts as an Introductory Film, Television and Screen Unit Option.

Interactive and Visual Design (KKBXMJR-INVISDN) Code Title

*Description: This major will provide you with the design concepts and principles, practical skills and working methods needed by a contemporary designer of visual and interactive media. You will learn how to design effectively for print and electronic media, Web and mobile media and computer games and become equipped with a versatile set of design practices to support you to enter careers in marketing, web design, electronic publishing, interaction design and the creative aspects of game design.

*Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this major.

It is recommended that you review the requisite requirements for units to ensure your unit selection enables you to successfully complete the requirements of this major. DXB102, DXB202 and DXB203 are highly recommended to be undertaken as first year units as they are requisites for many advanced units, but this is not compulsory.

48cp from the Introductory Interactive and Visual Design Unit Options

| | 0 1 | |
|---|-------------------------------------|--|
| DXB102 | Visual Communication | |
| DXB201 | Visual Interactions | |
| DXB202 | Image Production | |
| DXB203 | Introduction to Web Design | |
| DXB303 | Programming for Visual Designers | |
| 48cp from the Advanced Interactive and Visual Design Unit Options | | |
| DXB301 | Interface Design | |
| DXB302 | Typographic Design | |
| DXB402 | Theories of Visual Communication | |
| DXB501 | Tangible Media | |
| | | |
| DXB502 | Visual Information Design | |

*Note: DXB304, DXB401 and DXB403 are permitted to count towards the Advanced Interactive and Visual Design Unit Options if completed in 2017 or earlier.

*Note: KNB112, KIB309 and KIB315 are permitted to count towards this major if completed in 2014 or earlier.

*Note: KIB109 counts towards the Introductory Interactive and Visual Design Unit Options if completed in 2014 or earlier. KIB205 counts towards the Advanced unit options if completed in 2014 or earlier.

Journalism (KKBXMJR-JOURNAL) Code Title

*Description: This second major offers you a range of options to develop an understanding of the parameters of the journalism field. The second major will introduce you to a range of journalism writing styles and offers an insight into some specialist areas of reporting.

*Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this second major.

96cp from the Journalism Unit Options

| | • |
|--------|------------------------------|
| DFB404 | Fashion and Style Journalism |
| KJB101 | Computational Journalism |
| KJB103 | Media Design and Layout |
| KJB120 | Newswriting |
| KJB121 | Journalistic Inquiry |
| KJB222 | Online Journalism 1 |
| KJB224 | Feature Writing |
| KJB239 | Journalism Ethics and Issues |
| KJB280 | International Journalism |

KJB304 Sub-Editing

Literary Studies (KKBXMJR-LITSTD) Code Title

*Description: The aims of this major are to prepare students to graduate with adequate skills and knowledge in the area of literary and cultural studies; to provide a thorough grounding in a range of texts, both literary and popular, ranging from Shakespeare to nineteenth and twentieth century literature and culture; to provide graduates with enhanced skills in critical thinking, writing and analysis; to provide graduates with an understanding of the social and historical context of literary and popular written texts; to provide some understanding of the major approaches in literary theory.

*Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this major.

| 96cp from the Literary Studies Unit Options | |
|--|--|
| KWB10 8 | Introduction to Literary Studies |
| KWB10 9 | Writing Australia |
| KWB11 2 | Youth and Children's Writing |
| KWB20 7 | Great Books: Creative Writing Classics |
| KWB20 8 | Modern Times (Literature and Culture in the 20th Century) |
| KWB20 9 | Shakespeare, Then and Now |
| KWB21 0 | Imagining the Americas: Contemporary American Literature and Culture |
| KWB30 8 | Wonderlands: Literature and Culture in the 19th Century |
| KWB31 1 | Popular Fictions, Popular Culture |

*Note: It is expected that KWB112 Youth and Children's Writing, KWB207 Great Books: Creative Writing Classics and KWB210 Imagining the Americas: Contemporary American Literature and Culture will be offered for the final time in 2018. Students interested in these units are strongly encouraged to enrol in them in 2018.

Media and Communication (KKBXMJR-MEDIACM)

Code Title

*Description: This second major offers you a range of options to develop an understanding of the parameters of the professional communication field. The second major enables you to develop the skills and knowledge to prepare media material for organisations that wish to build, and maintain, a media profile.

*Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this second major.

48cp from the Introductory Media and Communication Unit Options

| KCB101 | Media and Communication Texts |
|--|--|
| KCB102 | Media Mythbusting |
| KCB103 | Strategic Speech Communication |
| KCB104 | Media and Communication: Industries |
| KCB105 | Inquiry in Media and Communication |
| 48cp from the Advanced Media and Communication Unit Options | |

KCB203 Consumption Matters:

Consumer Cultures and Identity KCB205 Professional Communication KCB206 Social Media, Self and Society

KCB301 Media Audiences

Music (KKBXMJR-MUSIC) Code Title

*Description: This major aims to impart a broad understanding of music practice in contemporary social, cultural and economic contexts. It aims to provide students with a combination of practical and theoretical skills to support a career in music within administrative, business, or organisational areas.

*Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this major.

It is recommended that you review the requisite requirements for units to ensure your unit selection enables you to successfully complete the requirements of this major.

48cp from the Introductory Music Unit Options

| KMB11 8 | Musicianship 1 | |
|--|---------------------------------|--|
| KMB11 9 | Music Production 1 | |
| KMB12 8 | Musicianship 2 | |
| KMB12 9 | Music Production 2 | |
| 48cp from the Advanced Music Unit Options | | |
| KMB20 0 | Music Scenes and Subcultures | |
| KMB21 5 | The Music Industry | |
| KMB21 6 | Audio / Visual Interaction | |
| KMB22 2 | Music and Culture | |
| KMB25 2 | Multi-Platform Sound Design | |
| *Note: KMB003_KMB004_KMB107 and | | |

*Note: KMB003, KMB004, KMB107 and KMB122 are permitted to count towards the Introductory Music Unit Options if completed in 2017 or earlier.

*Note: KDB225 is permitted to count towards the Advanced Music Unit Options if completed in 2017 or earlier.

*Note: It is expected that KMB200 and KMB252 will be offered for the final time in 2018. Students interested in these units are strongly encouraged to enrol in them in 2018.



| Year | 2018 |
|---------------------------|--|
| QUT code | IX57 |
| CRICOS | 059226F |
| Duration (full-time) | 4 years |
| OP | 7 |
| Rank | 87 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry (Information Technology), Associate Professor Tim Moroney (Mathematics); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement English (4,SA) and Maths B (4,SA).

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies (English (4,SA) and Maths B (4,SA)).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Course Update

As of 2014, this course will only be available for IX57 continuing students. New students should refer to SE30 **Bachelor of Information** Technology/Bachelor of Mathematics.

Professional Recognition

Graduates will be eligible for membership of the Mathematical Society of Australia, the Statistical Society of Australia and, depending on unit selection, the Australian Society for Operations Research. This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Financial Support

You should consider applying for an industry-sponsored mathematics bursary or an information technology scholarship to help you financially throughout your studies. For further information visit Scholarships.

Study Areas

IX57 will not have nominated majors and minors and consequently there will not be a Study Area A shown on a graduate's parchment. Instead, IX57 will have specialisations. The specialisation areas that will be available for students will include.

- Business Process Management
- Data Warehousing
- Digital Environments
- Enterprise Systems
- Information Management
- Network Systems
- Software Engineering
- Web Technologies

Cooperative Education

The Faculty's Cooperative Education Program gives you the opportunity of 10-12 months paid industry placement during your course where you can integrate real experience with what you're learning in your degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNITAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the Cooperative Education Program.

Pathways to Further Studies

In 2001, an accelerated Honours program was introduced to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year. The program allowed selected high achieving students the opportunity to undertake one postgraduate unit in the final semester of their a BIT degree (or double degree) which would be counted both for completion of the degree and towards the Honours program. The program also provided students with the opportunity to commence their Honours studies over the Summer Semester.

An alternative to the Honours program is the Master of Information Technology (Research). Students who complete a BIT degree (or double degree) with a grade point average equal to, or greater than 5 (7 point scale) and who have decided against enrolling in an Honours program, could undertake this course. In addition, students may wish to enrol in the redesigned postgraduate coursework Masters which has ten specialisations allowing students to either extend their





area of interest or specialise in other areas at the Masters level.

Domestic Course structure

Study areas

- You can choose to specialise in:
 - Business Process ManagementData Warehousing
 - Digital Societies
 - Enterprise Systems
 - Information Management
 - Network Systems
 - Software Engineering
 - Web Technologies.

International Course structure

Study areas

You can choose to specialise in:

- Business Process Management
 - Data Warehousing
- Digital Societies
- Enterprise Systems
- Information Management
- Network Systems
- Software Engineering
- Web Technologies.

QUT

Handbook

| Year | 2018 |
|------------------------------|---|
| QUT code | IX58 |
| CRICOS | 059595C |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry (Information Technology); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au; or, Director of Studies, QUT Business School; email: bus@qut.edu.au |
| Discipline Coordinator | Associate Prof Belinda Luke (Accountancy); Dr Louise Kelly (Advertising); Dr Radhika Lahiri (Economics); Dr Mark Doolan (Finance); Dr Ali Muhammad (Human Resource Management); Dr Shane Mathews (International Business); Dr Kavoos Mohannak (Management); Prof Larry Neale (Marketing); and Dr Anne Lane (Public Relations) Business Student Services phone 3138 2050 or email bus@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (English (4,SA) and Maths A, B or C (4,SA)).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Update

This course will be offered in 2014, however the course structure is being redeveloped and is subject to university approval.

For course updates please visit www.qut.edu.au/coursechanges

Study Areas

IX58 will not have nominated majors and minors for the IT component and consequently there will not be a Study Area A shown on a graduate's parchment for the Bachelor of Information Techology. Instead, the IT component will have specialisations. The specialisation areas that will be available for students will include:

- Business Process Management
- Data Warehousing
- Digital Societies
- Enterprise Systems
- Information Management
- Network Systems
- Software Engineering
- Web Technologies

The following Majors are available from the Business component: Accounting, Advertising, Economics, Finance, Human Resource Management, International Business, Management, Marketing and Public Relations.

Pathways to Futher Studies

In 2001, an accelerated Honours program was introduced to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year. The program allowed selected high achieving students the opportunity to undertake one postgraduate unit in the final semester of their a BIT degree (or double degree) which would be counted both for completion of the degree and towards the Honours program. The program also provided students with the opportunity to commence their Honours studies over the Summer Semester.

An alternative to the Honours program is the Master of Information Technology (Research). Students who complete a BIT degree (or double degree) with a grade point average equal to, or greater than 5 (7 point scale) and who have decided against enrolling in an Honours program, could undertake this course. In addition, students may wish to enrol in the redesigned postgraduate coursework Masters which has ten specialisations allowing students to either extend their area of interest or specialise in other areas at the Masters level.

Business: For BS63 Bachelor of Business (Honours) please click <u>BS63</u> for details.

Cooperative Education

The Science and Engineering Faculty's Cooperative Education Program gives you the opportunity of 10-12 months paid industry placement during your course where you can integrate real experience with what you're learning in your degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNITAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the <u>Cooperative</u> <u>Education Program.</u>

Important Information for Business Students

QUT Business School rules and procedures are outlined in the <u>Business</u> <u>Undergraduate Guidelines booklet</u>. Other useful information can be found on the <u>Student Services</u> website.

Domestic Course structure

IX58 will not have nominated majors and minors and consequently there will not be a Study Area A shown on a graduate's parchment. Instead, IX58 will have specialisations. The specialisation areas that will be available for students will include:

- Business process management
- Data warehousing
- Digital environments
- Enterprise systems
- Information management
- Network systems
- Software engineering
- Web technologies.

Business component:

- 8 Business School Core units (96 credit points)
- 8 Major Coré units (96 credit points)

Major Options

- Accounting*
- Advertising
- Economics
- Finance
- Human Resource Management
- International Business
- Management
- Marketing
- Public Relations

*Accounting major students complete 6 Business Core Units and 10 Accountancy major units to allow them to complete professional requirements.

International Course structure

Pathways to Further Studies

For high-achieving double degree students who wish to take further studies may enrol in BS63 Bachelor of Business (Honours).

Study Areas

IX58 will not have nominated majors and minors and consequently there will not be a Study Area A shown on a graduate's parchment. Instead, IX58 will have specialisations. The specialisation areas that will be available for students will include:

- Business Process Management
- Data Warehousing
- Digital Societies
- Enterprise Systems
- Information Management
- Network Systems
- Software Engineering
- Web Technologies

Business component:

- 8 Business School Core units (96 credit points)
- 8 Major Core units (96 credit points)

Major Options

- Accounting*
- Advertising
- Economics
- Finance
- Human Resource Management
- International Business
- Management
- Marketing
- Public Relations

*Accounting major students complete 6 Business Core Units and 10 Accountancy major units to allow them to complete professional requirements.

Sample Structure

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title | |
|--------------------------------|-------------------------------------|--|
| Year 1, Ser | nester 1 | |
| IFB101 | Impact of IT | |
| IFB102 | Computer Technology Fundamentals | |
| Business Unit | | |
| Business Unit | | |
| Year 1, Semester 2 | | |
| IFB103 | Designing for IT | |
| IFB104 | Building IT Systems | |
| Business Unit | | |
| Business Unit | | |
| Note: IND101 IND104 hours been | | |

[Note: INB101 - INB104 have been replaced with new units IFB101-104 from Semester 1 2014 onwards]

Year 2, Semester 1

| 10012,001 | | |
|--|--------------------------------------|--|
| IT Breadth Option Unit | | |
| IT Breadth Option Unit | | |
| Business Unit | | |
| Business U | nit | |
| Year 2, Ser | nester 2 | |
| IT Breadth | Option Unit | |
| IT Breadth | Option Unit | |
| Business U | nit | |
| Business Unit | | |
| Year 3, Ser | nester 1 | |
| IFB299 | IT Project Design and Development | |
| [INB201 replaced by IFB299 in 2015.] | | |
| INB201/IFB299 can only be taken after you have completed a minimum of 36 credit points of breadth units. | | |
| IT Specialist Option Unit | | |

Business Unit

Business Unit

Year 3, Semester 2

IFB398 Capstone Project (Phase 1) CAB398 replaced INB300 in 2016.

IFB398 then replaced CAB398 in 2017. If INB302 had been completed, INB300 was replaced with an option line.

INB300/CAB398/IFB398 and INB301 can only be taken after you have completed a minimum of 192 credit points of study.

IT Specialist Option Unit

Business Unit

Business Unit

Year 4, Semester 1

| IAB202 | Business of Information |
|--------|--------------------------------|
| IADZUZ | Technology |

[INB301 replaced by IAB202 in 2016]

INB300/CAB398/IFB398 and

INB301/IAB202 can only be taken after a student has completed a minimum of 168 credit points of study.

IT Specialist Option Unit

Business Unit

Business Unit

| Year 4, | Semester 2 |
|---------|------------|
|---------|------------|

| IFB399 | Capstone Project (Phase 2) | |
|---|----------------------------|--|
| If INB300 was replaced by CAB398/IFB398 on study plan in 2016, then INB302 was also replaced by CAB399/IFB399. Otherwise INB302 replaced with an option line in 2017. | | |
| IT Specialist Option Unit | | |
| Business Unit | | |
| Business Unit | | |



| Year | 2018 |
|-----------------------------------|--|
| QUT code | IX59 |
| CRICOS | 084925D |
| Duration (full-time) | 5 years |
| OP | 9 |
| Rank | 81 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$10,200 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$31,900 per year full-time (96 credit points) |
| Total credit points | 480 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Discipline Coordinator | +61 7 3138 2050; +61 7 3138 8822 bus@qut.edu.au; sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: Chemistry, Maths C, Physics

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: Chemistry, Maths C, Physics

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours) in IX59, students are required to complete 288 credit points of course units, as outlined below:

- First year: Four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp

To complete the Bachelor of Business students will complete 192 credit points of course units, as outlined below:

- eight Business School core units (96 credit points) *
- · eight major core units (96 credit points)

*Accounting major students complete six business core units and 10 accountancy major units to allow them to complete professional requirements.

International Course structure

To graduate with a Bachelor of Engineering (Honours) in IX59, students are required to complete 288 credit points of course units, as outlined below:

- First year: Four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp

To complete the Bachelor of Business students will complete 192 credit points of course units, as outlined below:

- eight Business School core units (96 credit points) *
- · eight major core units (96 credit points)

*Accounting major students complete six business core units and 10 accountancy major units to allow them to complete professional requirements.

Sample Structure Semesters

- Semester 1 (February)
- commencements Year 1 - Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 •
- Year 2 Semester 2 .
- Year 3 Semester 1 •
- Year 3 Semester 2 •
- Year 4 Semester 1
- Year 4 Semester 2 ٠
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title |
|-------------------------------------|--|
| Semester 1 (February) commencements | |
| Year 1 - Semester 1 | |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational |

Bachelor of Business/Bachelor of Engineering (Honours)

| | Explorations | |
|---------------------|--|--|
| Year 1 - Semest | ter 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | ter 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | ter 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit | | |
| Year 3 - Semest | ter 1 | |
| EGB261 | Unit Operations | |
| EGB323 | Fluid Mechanics | |
| Year 3 - Semest | ter 2 | |
| CVB101 | General Chemistry | |
| EGB322 | Thermodynamics | |
| Year 4 - Semest | | |
| EGB262 | Process Principles | |
| EGB362 | Operations Management and Process Economics | |
| Year 4 - Semest | ter 2 | |
| EGB364 | Process Modelling | |
| EGH411 | Industrial Chemistry | |
| Year 5 - Semest | ter 1 | |
| EGB361 | Minerals and Minerals Processing | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH463 | Plant and Process Design | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |
| EGH462 | Process Control | |
| Semesters | | |

So

| Semesters |
|--|
| <u>Semester 1 (February)</u> |
| commencements |
| Year 1 - Semester 1 |
| Year 1 - Semester 2 |
| Year 2 - Semester 1 |
| Year 2 - Semester 2 |
| Year 3 - Semester 1 |
| Year 3 - Semester 2 |
| Year 4, Semester 1 |
| Year 4 - Semester 2 |
| Year 5 - Semester 1 |
| Year 5 - Semester 2 |
| |
| Code Title |

| Semester 1 (February) commencements | |
|-------------------------------------|--|
| Year 1 - Semest | er 1 |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | Mathematics |
| OK | Computational |
| MXB161 | Explorations |
| Year 1 - Semest | |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | er 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | |
| | Civil Engineering |
| EGB123 | Systems |
| Foundation Unit | Option |
| Year 3 - Semest | er 1 |
| EGB270 | Civil Engineering Materials |
| EGB272 | Traffic and Transport Engineering |
| Year 3 - Semest | er 2 |
| EGB273 | Principles of Construction |
| EGB373 | Geotechnical Engineering |
| Year 4, Semeste | er 1 |
| EGB275 | Structural Mechanics |
| EGB371 | Engineering Hydraulics |
| Year 4 - Semest | er 2 |
| EGB376 | Steel Design |
| EGH471 | Advanced Water |
| | Engineering |
| Year 5 - Semest | |
| EGB375 | Design of Concrete Structures |
| EGH400-1 | Research Project 1 |
| EGH404 | Research in Engineering Practice |
| EGH473 | Advanced Geotechnical Engineering |
| Year 5 - Semest | er 2 |
| EGH400-2 | Research Project 2 |
| EGH472 | Advanced Highway and Pavement Engineering |
| EGH475 | Advanced Concrete Structures |
| EGH479 | Advances in Civil Engineering Practice |
| | |

Semesters

| Semesters | |
|--|----------------------------------|
| <u>Semester 1 (February)</u> | |
| <u>commencements</u> <u>Year 1 - Semester 1</u> | |
| Year 1 - Semester 2 | |
| Year 2 - Semester 1 | |
| Year 2 - Semester 2 Year 3 - Semester 1 | |
| Year 3 - Semester 2 | |
| Year 4 - Semester 1 | |
| Year 4 - Semester 2 | |
| Year 5 - Semester 1 Year 5 - Semester 2 | |
| Code Title | |
| | |
| Semester 1 (February) commencements Year 1 - Semester 1 | |
| | |
| EGB113 | Energy in Engineering Systems |
| M7D405 | Introductory |
| MZB125 | Engineering Mathematics |
| OR | mauremanos |
| | Computational |
| MXB161 | Explorations |
| Year 1 - Semester 2 | |
| | Engineering |
| EGB100 | Sustainability and |
| | Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semester 1 | |
| | Foundation of |
| EGB111 | Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semester 2 | |
| EGB120 | Foundations of |
| | Electrical Engineering |
| Foundation Unit | Option |
| Year 3 - Semester 1 | |
| CAB202 | Microprocessors and |
| | Digital Systems |
| EGB242 | Signal Analysis |
| Year 3 - Semester 2 | |
| CAB201 | Programming Principles |
| Intermediate Electrical Option Unit | |
| Year 4 - Semester 1 | |
| EGB240 | Electronic Design |
| Intermediate Sof | tware Option Unit |
| Year 4 - Semest | - |
| CAB403 | Systems Programming |
| Intermediate Electrical or Software Option Unit | |
| Year 5 - Semester 1 | |
| | Research in |
| EGH404 | Engineering Practice |
| EGH400-1 | Research Project 1 |
| Advanced Electrical or Software Option | |
| | |



| Unit | | |
|-----------------------------------|--------------------|--|
| EGH456 | Embedded Systems | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH455 Advanced Systems Design | | |
| Advanced Electrical Option Unit | | |
| Advanced Software Option Unit | | |

Semesters

- Semester 1 (February)
- commencements
- Year 1 Semester 1 Year 1 Semester 2 .
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 - Semester 1
- Year 3 Semester 2 ٠
- Year 4 - Semester 1
- Year 4 Semester 2
- Year 5 Semester 1 Year 5 Semester 2 ٠
- .

| Code | Title | |
|---|---|--|
| Semester 1 (February) commencements | | |
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Seme | ester 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Seme | ester 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semester 2 | | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB120 | Foundations of Electrical Engineering | |
| Year 3 - Seme | ester 1 | |
| EGB240 | Electronic Design | |
| EGB241 | Electromagnetics and Machines | |
| Year 3 - Semester 2 | | |
| EGB242 | Signal Analysis | |
| Intermediate Electrical Option Unit (1) | | |
| EGB348 can be selected from the list. A requisite waiver for this unit will be granted if you are enrolled in EGB242 at the same time . | | |
| Year 4 - Semester 1 | | |
| EGB340 | Design and Practice | |

| Foundation Unit Option | | |
|---|-------------------------------------|--|
| Year 4 - Semester 2 | | |
| Intermediate Electrical Option Unit (2) | | |
| Intermediate Electrical Option Unit (3) | | |
| Year 5 - Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| Advanced Electrical Option Unit (1) | | |
| Advanced Electrical Option Unit (2) | | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| Advanced Electrical Option Unit (3) | | |
| Advanced Electrical Option Unit (4) | | |
| Advanced Electrical Option Unit (5) | | |
| | | |

Semesters

- Semester 1 (February) commencements . Year 1 - Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1 ٠ .
- Year 3 Semester 2 • Year 4 - Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
 Year 5 Semester 2

| Code | Title | |
|-------------------------------------|--|--|
| Semester 1 (February) commencements | | |
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semester 1 | | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semester 2 | | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit Option | | |
| Year 3 - Semester 1 | | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB240 | Electronic Design | |
| Year 3 - Semester 2 | | |

| EGB242 | Signal Analysis | |
|--|--|--|
| Intermediate Electrical Option Unit | | |
| Year 4 - Semester 1 | | |
| EGB243 | Aircraft Systems and Flight | |
| EGB349 | Systems Engineering and Design Project | |
| Year 4 - Semest | er 2 | |
| EGB345 | Control and Dynamic Systems | |
| EGB346 | Unmanned Aircraft Systems | |
| Year 5 - Semester 1 | | |
| Year 5 - Semest | er 1 | |
| Year 5 - Semest EGH400-1 | er 1 Research Project 1 | |
| | | |
| EGH400-1 | Research Project 1 Research in | |
| EGH400-1 EGH404 | Research Project 1 Research in Engineering Practice Autonomous Systems | |
| EGH400-1 EGH404 EGH446 | Research Project 1 Research in Engineering Practice Autonomous Systems rical Option Unit | |
| EGH400-1 EGH404 EGH446 Advanced Electr | Research Project 1 Research in Engineering Practice Autonomous Systems rical Option Unit | |
| EGH400-1 EGH404 EGH446 Advanced Electr Year 5 - Semest | Research Project 1 Research in Engineering Practice Autonomous Systems ical Option Unit er 2 | |
| EGH400-1 EGH404 EGH446 Advanced Electr Year 5 - Semest EGH400-2 | Research Project 1 Research in Engineering Practice Autonomous Systems rical Option Unit er 2 Research Project 2 | |

Semesters

- Semester 1 (February)
 - commencements
- Year 1 Semester 1 • Year 1 - Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- •
- Year 3 Semester 2 Year 4 Semester 1 .
- Year 4 Semester 2 •
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title | |
|-------------------------------------|--|--|
| Semester 1 (February) commencements | | |
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semester 1 | | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |

QU

| Year 2 - Semester 2 | | |
|------------------------|--|--|
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit Option | | |
| Year 3 - Semest | ter 1 | |
| EGB210 | Fundamentals of Mechanical Design | |
| EGB214 | Materials and Manufacturing | |
| Year 3 - Semest | ter 2 | |
| EGB211 | Dynamics | |
| EGB314 | Strength of Materials | |
| Year 4 - Semest | ter 1 | |
| EGB321 | Dynamics of Machines | |
| EGB323 | Fluid Mechanics | |
| Year 4 - Semest | ter 2 | |
| EGB322 | Thermodynamics | |
| EGH404 | Research in Engineering Practice | |
| Year 5 - Semest | ter 1 | |
| EGB316 | Design of Machine Elements | |
| EGH400-1 | Research Project 1 | |
| EGH414 | Stress Analysis | |
| EGH421 | Vibration and Control | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH420 | Mechanical Systems Design | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |

Semesters

- Semester 1 (February)
- commencements
- Year 1 Semester 1
 Year 1 Semester 2
- Year 2 Semester 1 •
- Year 2 Semester 2
- Year 3 Semester 1
 Year 3 Semester 2
- Year 4 Semester 1 •
- Year 4 - Semester 2
- Year 5 - Semester 1
- Year 5 Semester 2 •

| Code | Title | |
|-------------------------------------|--|--|
| Semester 1 (February) commencements | | |
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semester 2 | | |

| EGB100 | Engineering Sustainability and Professional Practice | |
|-------------------------------------|--|--|
| MZB126 | Engineering Computation | |
| Year 2 - Semest | er 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | er 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit | Option | |
| Year 3 - Semest | er 1 | |
| EGB211 | Dynamics | |
| EGB242 | Signal Analysis | |
| Year 3 - Semester 2 | | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB345 | Control and Dynamic Systems | |
| Year 4 - Semester 1 | | |
| EGB220 | Mechatronics Design 1 | |
| EGB321 | Dynamics of Machines | |
| Year 4 - Semest | er 2 | |
| EGB320 | Mechatronics Design 2 | |
| Intermediate Electrical Option Unit | | |
| Year 5 - Semest | er 1 | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH419 | Mechatronics Design 3 | |
| EGH446 | Autonomous Systems | |
| Year 5 - Semest | er 2 | |
| EGH400-2 | Research Project 2 | |
| EGH413 | Advanced Dynamics | |
| EGH445 | Modern Control | |
| Advanced Electr | rical Option Unit | |
| | | |

Semesters

| ٠ | Semester 1 | (February) |
|---|------------|------------|
| | | |

- commencements Year 1 - Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 ٠
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1 Year 4 - Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title | |
|-------------------------------------|----------------------------------|--|
| Semester 1 (February) commencements | | |
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory | |

| | Engineering Mathematics | |
|---------------------------|--|--|
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semester 2 | | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | er 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit | • | |
| Year 3 - Semest | | |
| EGB210 | Fundamentals of Mechanical Design | |
| LSB131 | Anatomy | |
| Year 3 - Semester 2 | | |
| EGB211 | Dynamics | |
| LSB231 | Physiology | |
| Year 4 - Semester 1 | | |
| EGB214 | Materials and Manufacturing | |
| EGB323 | Fluid Mechanics | |
| Year 4 - Semest | | |
| EGB314 | Strength of Materials | |
| EGH404 | Research in Engineering Practice | |
| Year 5 - Semest | | |
| EGB319 | BioDesign | |
| EGH400-1 | Research Project 1 | |
| EGH414 | Stress Analysis | |
| EGH418 Year 5 - Semest | Biomechanics | |
| EGH400-2 | Research Project 2 | |
| EGH424 | Biofluids | |
| | Modelling and | |
| EGH435 | Simulation for Medical Engineers | |
| EGH438 | Biomaterials | |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2 ٠
- Year 3 Semester 1 Year 3 Semester 2 ٠
- •
- Year 4 Semester 1 •

Title

Year 4 Semester 2

Code



| Year 1 Semester 1 | |
|-------------------|---|
| BSB110 | Accounting |
| BSB115 | Management |
| Year 1 Semester 2 | |
| BSB111 | Business Law and Ethics |
| BSB126 | Marketing |
| Year 2 Semester 1 | |
| AYB200 | Financial Accounting |
| AYB225 | Management Accounting |
| Year 2 Semester 2 | |
| AYB221 | Accounting Systems and Technologies |
| BSB113 | Economics |
| Year 3 Semester 1 | |
| EFB210 | Finance 1 |
| BSB399 | Real World Ready - Business Capstone |
| Year 3 Semester 2 | |
| AYB321 | Strategic Management Accounting |
| AYB340 | Company Accounting |
| Year 4 Semester 1 | |
| AYB219 | Taxation Law |
| AYB230 | Corporations Law |
| Year 4 Semester 2 | |
| AYB301 | Audit and Assurance |
| AYB311 | Financial Accounting Issues |

Semesters

- Semester 1 (February)
- <u>commencement</u>
- Year 1 Semester 1
- Year 1 Semester 2 •
- Year 2 Semester 1 Year 2 Semester 2 ٠
- Year 3 Semester 1 •
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Semester 2 (July) commencement ٠
- Year 1, Semester 2
- Year 2, Semester 1 ٠
- Year 2, Semester 2 Year 3, Semester 1 •
- .
- Year 3, Semester 2 •
- Year 4, Semester 1 ٠ •
- Year 4, Semester 2 Year 5, Semester 1
- .

| Code | Title |
|------------------------------------|-----------|
| Semester 1 (February) commencement | |
| Year 1 Semester 1 | |
| BSB113 | Economics |
| BSB126 | Marketing |
| Year 1 Semester 2 | |

| BSB110 | Accounting |
|--|---|
| BSB115 | Management |
| Year 2 Semester 1 | |
| AMB220 | Advertising Theory and Practice |
| MGB227 | Entrepreneurship |
| Year 2 Semester 2 | |
| AMB200 | Consumer Behaviour |
| AMB201 | Marketing and Audience Research |
| Year 3 Semester 1 | |
| BSB111 | Business Law and |
| BSB119 | Ethics Global Business |
| Year 3 Semester 2 | |
| AMB318 | Advertising Copywriting |
| AMB319 | Media Planning |
| Year 4 Semester 1 | |
| AMB320 | Advertising Management |
| AMB330 | Digital Portfolio |
| Year 4 Semester 2 | |
| | Advertising |
| AMB339 | Campaigns |
| BSB399 | Real World Ready - Business Capstone |
| | |
| Semester 2 (July) | |
| Semester 2 (July) of Year 1, Semester 2 | |
| | |
| Year 1, Semester 2 | 2 |
| Year 1, Semester 2 BSB126 | 2 Marketing Economics |
| Year 1, Semester 2 BSB126 BSB113 | 2 Marketing Economics |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 | 2 Marketing Economics |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 | 2 Marketing Economics Accounting Management |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 | 2 Marketing Economics Accounting Management |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 | 2 Marketing Economics Accounting Management |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 | 2 Marketing Economics Accounting Management Management Global Business Advertising Theory and Practice |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 | 2 Marketing Economics Accounting Management Management Global Business Advertising Theory and Practice |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 | 2 Marketing Economics Accounting Management Global Business Advertising Theory and Practice Marketing and |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 | Accounting Accounting Management Management Global Business Advertising Theory and Practice Marketing and Audience Research Consumer Behaviour |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 AMB200 | Accounting Accounting Management Management Global Business Advertising Theory and Practice Marketing and Audience Research Consumer Behaviour |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 AMB200 Year 3, Semester 2 | Marketing Economics Economics Accounting Management Management Global Business Advertising Theory and Practice Marketing and Audience Research Consumer Behaviour |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 AMB200 Year 3, Semester 2 AMB318 | AdvertisingMarketingEconomicsAccountingManagementManagementGlobal BusinessAdvertising Theory and PracticeMarketing and Audience ResearchConsumer BehaviourAdvertising CopywritingMarketing and Audience ResearchMarketing and Audience Research <trt< td=""></trt<> |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 AMB200 Year 3, Semester 2 AMB318 AMB319 | Marketing Economics Accounting Management Management Global Business Advertising Theory and Practice Marketing and Audience Research Consumer Behaviour Advertising Copywriting Media Planning |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 AMB200 Year 3, Semester 2 AMB318 AMB319 Year 4, Semester 7 | Accounting Accounting Management Accounting Management Global Business Advertising Theory and Practice Marketing and Advertising and Audience Research Consumer Behaviour Advertising Copywriting Media Planning |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 AMB200 Year 3, Semester 2 AMB318 AMB319 Year 4, Semester 7 AMB320 AMB320 | AdvertisingMarketingEconomicsAccountingManagementManagementGlobal BusinessAdvertising Theory and PracticeMarketing and Audience ResearchConsumer BehaviourAdvertising CopywritingMadia PlanningAdvertising ManagementDigital Portfolio |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 Year 3, Semester 2 AMB318 AMB318 AMB319 Year 4, Semester 7 AMB320 | MarketingMarketingEconomicsAccountingManagementManagementGlobal BusinessAdvertising Theory and PracticeMarketing and Audience ResearchConsumer BehaviourAdvertising CopywritingMedia PlanningAdvertising ManagementDigital PortfolioAdvertising Advertising |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 AMB201 Year 3, Semester 2 AMB318 AMB318 AMB319 Year 4, Semester 7 AMB320 AMB320 | MarketingMarketingEconomicsAccountingManagementManagementGlobal BusinessAdvertising Theory and PracticeMarketing and Audience ResearchConsumer BehaviourAdvertising CopywritingMedia PlanningAdvertising ManagementDigital Portfolio |

| | Ethics |
|--------------------|---|
| Year 5, Semester 1 | |
| MGB227 | Entrepreneurship |
| BSB399 | Real World Ready - Business Capstone |

- Semester 1 (February) commencement
 - Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2 •
- Year 4 Semester 1
- Year 4 Semester 2
- ٠ Semester 2 (February) commencement
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1 .
- Year 3, Semester 2
- Year 4, Semester 1 .
- •
- Year 4, Semester 2 Year 5, Semester 1 .
- Applied Economics Unit Options •
- Quantitative Economics Unit **Options**

| Code | Title | | |
|---|--------------------------------|--|--|
| Semester 1 (February) commencement | | | |
| Year 1 Semester | Year 1 Semester 1 | | |
| BSB113 | Economics | | |
| BSB115 | Management | | |
| Year 1 Semester 2 | | | |
| BSB110 | Accounting | | |
| EFB223 | Economics 2 | | |
| Year 2 Semester | 1 | | |
| EFB330 | Intermediate Macroeconomics | | |
| EFB331 | Intermediate Microeconomics | | |
| Year 2 Semester | 2 | | |
| BSB111 | Business Law and Ethics | | |
| Choose an elective from the Applied Economics or Quantitative Economics Unit Option lists | | | |
| Year 3 Semester | Year 3 Semester 1 | | |
| MGB227 | Entrepreneurship | | |
| Choose an elective from the Applied Economics or Quantitative Economics Unit Option lists | | | |
| Year 3 Semester 2 | | | |
| BSB119 | Global Business | | |
| Choose an elective from the Applied Economics or Quantitative Economics Unit Option lists | | | |
| Year 4 Semester | 1 | | |
| BSB399 | Real World Ready - | | |



Business Capstone Choose an elective from the Applied Economics or Quantitative Economics Unit Option lists

| Year 4 Semester | | |
|---|--|--|
| | Contemporary | |
| EFB338 | Application of Economic Theory | |
| BSB126 | - | |
| | Marketing | |
| | ruary) commencement | |
| Year 1, Semester | | |
| BSB113 | Economics | |
| BSB115 | Management | |
| Year 2, Semester | | |
| BSB110 | Accounting | |
| EFB223 | Economics 2 | |
| Year 2, Semester | 2 | |
| EFB330 | Intermediate | |
| 21 2000 | Macroeconomics | |
| EFB331 | Intermediate | |
| | Microeconomics | |
| Year 3, Semester | | |
| BSB111 | Business Law and | |
| - | Ethics | |
| Economics Optio | | |
| Year 3, Semester | 1 | |
| MGB227 | Entrepreneurship | |
| Economics Optio | | |
| Year 4, Semester | r 1 | |
| BSB119 | Global Business | |
| Economics Optio | n Unit | |
| Year 4, Semester | r 2 | |
| | | |
| | Contemporary | |
| EFB338 | Contemporary Application of | |
| | Contemporary Application of Economic Theory | |
| EFB338 Economics Optio | Contemporary Application of Economic Theory | |
| | Contemporary Application of Economic Theory n Unit | |
| Economics Optio | Contemporary Application of Economic Theory n Unit | |
| Economics Optio Year 5, Semester BSB126 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - | |
| Economics Optio Year 5, Semester BSB126 BSB399 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options | |
| Economics Optio Year 5, Semester BSB126 BSB399 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 | Contemporary Application of Economic Theory I Unit Marketing Real World Ready - Business Capstone Conomics Capstone Financial Markets Economics for the Real World Environmental Economics and Policy International Economics | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics Somics Unit Options Introduction to Applied | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 Quantitative Econ | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics Introduction to Applied Econometrics | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 Quantitative Econ | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone CS Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics Introduction to Applied Econometrics Applied Behavioural | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 Quantitative Econ EFB222 EFB332 | Contemporary Application of Economic Theory In Unit I Marketing Real World Ready - Business Capstone Source Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics Introduction to Applied Econometrics Applied Behavioural Economics | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 Quantitative Econ EFB222 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics Introduction to Applied Econometrics Applied Behavioural Economics | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 Quantitative Econ EFB222 EFB332 | Contemporary Application of Economic Theory In Unit I Marketing Real World Ready - Business Capstone Source Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics Introduction to Applied Econometrics Applied Behavioural Economics | |

- Semester 1 (February) commencement
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 Year 2 Semester 2
- ٠ Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Semester 2 (July) commencement
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 Year 4, Semester 2
- Year 5, Semester 1

| <u>rear 5, bemester 1</u> | | |
|------------------------------------|---|--|
| Code | Title | |
| Semester 1 (February) commencement | | |
| Year 1 Semester 1 | | |
| BSB113 | Economics | |
| BSB115 | Management | |
| Year 1 Semester 2 | | |
| EFB223 | Economics 2 | |
| BSB126 | Marketing | |
| Year 2 Semester 1 | | |
| BSB110 | Accounting | |
| MGB227 | Entrepreneurship | |
| Year 2 Semester 2 | | |
| EFB201 | Financial Markets | |
| EFB210 | Finance 1 | |
| Year 3 Semester 1 | | |
| BSB111 | Business Law and Ethics | |
| EFB335 | Investments | |
| Year 3 Semester 2 | | |
| EFB343 | Corporate Finance | |
| EFB344 | Risk Management and Derivatives | |
| Year 4 Semester 1 | | |
| BSB399 | Real World Ready - Business Capstone | |
| EFB312 | International Finance | |
| Year 4 Semester 2 | | |
| BSB119 | Global Business | |
| EFB360 | Finance Capstone | |
| Semester 2 (July) of | commencement | |
| Year 1, Semester 2 | 2 | |
| BSB113 | Economics | |
| BSB115 | Management | |
| Year 2, Semester 1 | | |
| EFB223 | Economics 2 | |
| BSB126 | Marketing | |
| Year 2, Semester 2 | 2 | |
| BSB110 | Accounting | |

| MGB227 | Entrepreneurship | |
|--------------------|---|--|
| Year 3, Semester 1 | | |
| EFB201 | Financial Markets | |
| EFB210 | Finance 1 | |
| Year 3, Semester 2 | | |
| BSB111 | Business Law and Ethics | |
| EFB335 | Investments | |
| Year 4, Semester 1 | | |
| EFB343 | Corporate Finance | |
| EFB344 | Risk Management and Derivatives | |
| Year 4, Semester 2 | | |
| BSB399 | Real World Ready - Business Capstone | |
| EFB312 | International Finance | |
| Year 5, Semester 1 | | |
| BSB119 | Global Business | |
| EFB360 | Finance Capstone | |

| ٠ | Semester 1 | (February) |
|---|--------------|------------|
| | commencement | |

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
 Year 2 Semester 2
- Year 3 Semester 1 Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Semester 2 (July) commencement

| Code | Title | |
|------------------------------------|---|--|
| Semester 1 (February) commencement | | |
| Year 1 Semester 1 | | |
| BSB113 | Economics | |
| BSB115 | Management | |
| Year 1 Semester 2 | | |
| BSB111 | Business Law and Ethics | |
| BSB119 | Global Business | |
| Year 2 Semester 1 | | |
| MGB227 | Entrepreneurship | |
| MGB200 | Managing People | |
| Year 2 Semester 2 | 2 | |
| MGB207 | Human Resource Issues and Strategy | |
| BSB110 | Accounting | |
| Year 3 Semester 1 | | |
| MGB220 | Human Resource Decision Making | |
| MGB331 | Learning and Development in Organisations | |
| Year 3 Semester 2 | 2 | |
| MGB201 | Contemporary Employment Relations | |



| BSB126 | Marketing | |
|-------------------|---|--|
| Year 4 Semester 1 | | |
| BSB399 | Real World Ready - Business Capstone | |
| MGB339 | Performance and Reward | |
| Year 4 Semester | 2 | |
| MGB320 | Recruitment and Selection | |
| MGB370 | Personal and Professional Development | |
| Semester 2 (July) | commencement | |
| Course Notes | | |

Semesters

• Semester 1 (February) commencement Year 1 Semester 1 Year 1 Semester 2
 Year 2 Semester 1 Year 2 Semester 2 Year 3 Semester 1 Year 3 Semester 2 Year 4 Semester 1 ٠ Year 4 Semester 2 ٠ Semester 2 (July) commencement Year 1, Semester 2 Year 2, Semester 1 Year 2, Semester 2 ٠ ٠ ٠ Year 3, Semester 1 Year 3, Semester 2 ٠ Year 4, Semester 1 Year 4, Semester 2 ٠ ٠ • Year 5, Semester 1

| Code | Title |
|-------------------|--|
| Semester 1 (Feb | ruary) commencement |
| Year 1 Semeste | r 1 |
| BSB119 | Global Business |
| BSB126 | Marketing |
| Year 1 Semester 2 | |
| BSB110 | Accounting |
| BSB115 | Management |
| Year 2 Semester 1 | |
| BSB113 | Economics |
| MGB225 | Intercultural Communication and Negotiation Skills |
| Year 2 Semester 2 | |
| BSB111 | Business Law and |

| | Ethics |
|---|--|
| MGB227 | Entrepreneurship |
| Year 3 Semeste | r 1 |
| MGB340 | International Business in the Asia-Pacific |
| AYB227 | International Accounting |
| Year 3 Semeste | |
| AMB210 | Importing and Exporting |
| EFB240 | Finance for International Business |
| Year 4 Semeste | |
| AMB303 | International Logistics |
| AMB336 | International Marketing |
| Year 4 Semeste | r 2 International Business |
| AMB369 | Strategy |
| BSB399 | Real World Ready - Business Capstone |
| | /) commencement |
| Year 1, Semeste | |
| BSB119 | Global Business |
| BSB126 | Marketing |
| Year 2, Semeste BSB110 | Accounting |
| BSB115 | Management |
| | |
| | - |
| Year 2, Semeste | er 2 |
| | er 2 Economics |
| Year 2, Semeste BSB113 MGB227 | er 2 Economics Entrepreneurship |
| Year 2, Semeste BSB113 | er 2 Economics Entrepreneurship |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste | er 2 Economics Entrepreneurship er 1 International |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business er 1 |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business er 1 International Logistics |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 AMB336 | er 2 Economics Entrepreneurship r 1 International Accounting Intercultural Communication and Negotiation Skills r 2 Importing and Exporting Finance for International Business r 1 International Logistics International Marketing |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business er 1 International Logistics International Marketing er 2 |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 AMB336 | er 2 Economics Entrepreneurship r 1 International Accounting Intercultural Communication and Negotiation Skills r 2 Importing and Exporting Finance for International Business r 1 International Logistics International Marketing r 2 International Business in the Asia-Pacific |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 AMB336 Year 4, Semeste MGB340 AMB369 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business er 1 International Business International Marketing er 2 International Business in the Asia-Pacific International Business Strategy |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 AMB336 Year 4, Semeste MGB340 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business er 1 International Logistics International Marketing er 2 International Business in the Asia-Pacific International Business strategy er 1 |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 AMB336 Year 4, Semeste MGB340 AMB369 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business er 1 International Business International Marketing er 2 International Business in the Asia-Pacific International Business Strategy |

Semesters

• Semester 1 (February)

| commence | nent |
|--|--|
| Year 1 Ser | |
| Year 1 Ser Year 2 Ser | |
| <u>Year 2 Ser</u> | |
| Year 3 Ser | nester 1 |
| Year 3 Ser | mester 2 |
| Year 4 Ser Year 4 Ser | |
| | 2 (July) commencement |
| Year 1, Se | mester 2 |
| • <u>Year 2, Se</u> | |
| Year 2, Semester 2 Year 3, Semester 1 | |
| Year 3, Se | mester 2 |
| • <u>Year 4, Se</u> | mester 1 |
| Year 4, Se Year 5, Se | |
| | |
| Code | Title |
| | bruary) commencment |
| Year 1 Semeste | |
| BSB113 | Economics |
| BSB115 | Management |
| Year 1 Semeste | |
| BSB111 | Business Law and |
| D0D400 | Ethics |
| BSB126 | Marketing |
| Year 2 Semeste | |
| BSB110 | Accounting |
| BSB119 | Global Business |
| Year 2 Semeste | er 2 |
| MGB200 | Managing People |
| MGB227 | Entrepreneurship |
| Year 3 Semeste | er 1 |
| MGB226 | Innovation, Knowledge and Creativity |
| If you are compl stream: | leting the Management |
| MGB210 | Managing Operations |
| If you are comp | ••• |
| Entrepreneursh | |
| - | Contemporary |
| MGB201 | Employment Relations |
| Year 3 Semeste | er 2 |
| MGB225 | Intercultural Communication and |
| MGB335 | Negotiation Skills Managing Projects |
| | Managing Business |
| MGB324 | Growth |
| MGB324 Year 4 Semeste | Growth |
| | Growth |
| Year 4 Semeste | Growth er 1 Real World Ready - |
| Year 4 Semeste BSB399 | Growth er 1 Real World Ready - Business Capstone Managing Risk |
| Year 4 Semeste BSB399 MGB341 | Growth er 1 Real World Ready - Business Capstone Managing Risk er 2 |
| Year 4 Semeste BSB399 MGB341 Year 4 Semeste | Growth er 1 Real World Ready - Business Capstone Managing Risk |

QUT

| | Change | |
|--|--|--|
| MGB338 | Workplace Learning | |
| Semester 2 (July | y) commencement | |
| Year 1, Semeste | er 2 | |
| BSB115 | Management | |
| BSB119 | Global Business | |
| Year 2, Semeste | | |
| BSB113 | Economics | |
| BSB126 | Marketing | |
| Year 2, Semeste | | |
| BSB111 | Business Law and Ethics | |
| BSB110 | Accounting | |
| Year 3, Semeste | | |
| MGB200 | Managing People | |
| MGB225 | Intercultural Communication and Negotiation Skills | |
| Year 3, Semeste | | |
| MGB226 | Innovation, Knowledge and Creativity | |
| MGB227 | Entrepreneurship | |
| Year 4, Semeste | er 1 | |
| MGB341 | Managing Risk | |
| If you are compl stream: | eting a management | |
| MGB210 | Managing Operations | |
| If you are compl entrepreneurshi | | |
| MGB201 | Contemporary Employment Relations | |
| Year 4, Semeste | er 2 | |
| MGB309 | Managing Strategically | |
| If you are completing a management stream: | | |
| MGB335 | Managing Projects | |
| If you are compl entrepreneurshi | - | |
| MGB324 | Managing Business Growth | |
| Year 5, Semeste | er 1 | |
| BSB399 | Real World Ready - Business Capstone | |
| Choose one of t | he following: | |
| MGB310 | Managing Sustainable Change | |
| MGB338 | Workplace Learning | |

Semesters

| ٠ | Semester 1 | (February) |
|---|------------|------------|
| | | |

- commencement ٠
- Year 1 Semester 1 Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- ٠ Year 3 Semester 1
- Year 3 Semester 2 ٠
- Year 4 Semester 1

| U U (| |
|---|---|
| Year 4 Semes Semester 2 (J Year 1, Semes Year 2, Semes Year 2, Semes Year 3, Semes Year 3, Semes Year 4, Semes Year 4, Semes Year 5, Semes | uly) commencement ster 2 ster 1 ster 2 ster 1 ster 2 ster 1 ster 2 ster 1 ster 2 |
| Code | Title |
| Semester 1 (Februa | ary) commencement |
| Year 1 Semester 1 | |
| BSB113 | Economics |
| BSB126 | Marketing |
| Year 1 Semester 2 | |
| | Business Law and |

| BSB111 | Business Law and Ethics |
|--------------------|---|
| BSB115 | Management |
| Year 2 Semester 1 | |
| MGB227 | Entrepreneurship |
| BSB119 | Global Business |
| Year 2 Semester 2 | |
| AMB201 | Marketing and Audience Research |
| AMB200 | Consumer Behaviour |
| Year 3 Semester 1 | |
| AMB202 | Integrated Marketing Communication |
| AMB240 | Marketing Planning and Management |
| Year 3 Semester 2 | |
| BSB110 | Accounting |
| AMB336 | International Marketing |
| Year 4 Semester 1 | |
| AMB330 | Digital Portfolio |
| AMB340 | Services Marketing |
| Year 4 Semester 2 | |
| BSB399 | Real World Ready - Business Capstone |
| AMB359 | Strategic Marketing |
| Semester 2 (July) | commencement |
| Year 1, Semester 2 | 2 |
| BSB113 | Economics |
| BSB126 | Marketing |
| Year 2, Semester | 1 |
| BSB111 | Business Law and Ethics |
| BSB115 | Management |
| Year 2, Semester 2 | 2 |
| BSB110 | Accounting |
| AMB200 | Consumer Behaviour |
| Year 3, Semester | 1 |
| AMB201 | Marketing and |

| | Audionas Desserab | |
|--------------------|---|--|
| | Audience Research | |
| AMB240 | Marketing Planning and Management | |
| Year 3, Semester 2 | 2 | |
| AMB202 | Integrated Marketing Communication | |
| BSB119 | Global Business | |
| Year 4, Semester | 1 | |
| AMB330 | Digital Portfolio | |
| AMB340 | Services Marketing | |
| Year 4, Semester 2 | | |
| MGB227 | Entrepreneurship | |
| AMB336 | International Marketing | |
| Year 5, Semester 1 | | |
| BSB399 | Real World Ready - Business Capstone | |
| AMB359 | Strategic Marketing | |
| | | |

| Semesters | | |
|---|------------------------------------|--|
| Semesters Semester 1 (February) commencement Year 1 Semester 1 Year 1 Semester 2 Year 2 Semester 2 Year 2 Semester 2 Year 3 Semester 1 Year 3 Semester 2 Year 4 Semester 2 Semester 2 (July) commencement Year 1, Semester 2 Year 2, Semester 1 Year 3, Semester 1 Year 3, Semester 2 Year 4, Semester 2 Year 4, Semester 1 Year 4, Semester 1 Year 4, Semester 1 | | |
| Year 4, Seme | | |
| Year 5, Seme | | |
| Code | Title | |
| Semester 1 (Febru | ary) commencement | |
| Year 1 Semester 1 | | |
| BSB119 | Global Business | |
| BSB126 | Marketing | |
| Year 1 Semester 2 | | |
| BSB110 | Accounting | |
| BSB115 | Management | |
| Year 2 Semester 1 | | |
| AMB263 | Introduction to Public Relations | |
| AMB264 | Public Relations Techniques | |
| Year 2 Semester 2 | | |
| AMB201 | Marketing and Audience Research | |
| BSB111 | Business Law and Ethics | |
| Voor 2 Competer 1 | | |
| Year 3 Semester 1 | | |



| | - |
|--------------------|---|
| AMB372 | Public Relations Planning |
| Year 3 Semester 2 | - |
| BSB113 | Economics |
| MGB227 | Entrepreneurship |
| Year 4 Semester 1 | |
| | Global Public |
| AMB374 | Relations Cases |
| BSB399 | Real World Ready - Business Capstone |
| Year 4 Semester 2 | |
| AMB375 | Public Relations Management |
| AMB379 | Public Relations Campaigns |
| Semester 2 (July) | |
| Year 1, Semester 2 | 2 |
| BSB119 | Global Business |
| BSB126 | Marketing |
| Year 2, Semester 2 | |
| BSB110 | Accounting |
| BSB115 | Management |
| Year 2, Semester 2 | 2 |
| BSB113 | Economics |
| AMB201 | Marketing and Audience Research |
| Year 3, Semester 7 | |
| AMB263 | Introduction to Public Relations |
| AMB264 | Public Relations Techniques |
| Year 3, Semester 2 | 2 |
| AMB372 | Public Relations Planning |
| MGB227 | Entrepreneurship |
| Year 4, Semester 7 | l |
| AMB373 | Issues, Stakeholders and Reputation |
| AMB374 | Global Public Relations Cases |
| Year 4, Semeter 2 | |
| AMB375 | Public Relations Management |
| AMB379 | Public Relations Campaigns |
| Year 5, Semester ? | 1 |
| BSB399 | Real World Ready - Business Capstone |
| BSB111 | Business Law and Ethics |
| | |



QUT

Handbook

| Year | 2018 |
|---------------------------------|--|
| QUT code | IX62 |
| CRICOS | 063022F |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 82 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Taizan Chan (Corporate Systems Management); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au; or, Director of Studies, QUT Business School; email: bus@qut.edu.au |
| Discipline Coordinator | Associate Prof Belinda Luke (Accountancy); Dr Louise Kelly (Advertising); Dr Radhika Lahiri (Economics); Dr Mark Doolan (Finance); Dr Ali Muhammad (Human Resource Management); Dr Shane Mathews (International Business); Dr Kavoos Mohannak (Management); Prof Larry Neale (Marketing); and Dr Anne Lane (Public Relations) Business Student Services - (07) 3138 2050 Business Student Services phone 3138 2050 or email bus@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (English (4, SA) and Math A, B or C (4, SA)).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking 6.0 | |

Course Update

This course is currently under review. The course structure is being redeveloped and is subject to university approval. For course updates please visit www.qut.edu.au/coursechanges

Professional Recognition

Corporate Systems Management component: The course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Business component: Students may be eligible for membership to a number of professional bodies depending on choice of major and unit selection. Details on professional recognition can be found under the individual majors of the Bachelor of Business (BS05).

Course Design

Students are required to complete 384 credit points (32 units) comprised of 192 credit points (16 units) from the Bachelor of Business program and 192 credit points (16 units) from the Bachelor of Corporate Systems Management program which includes an industry based project and an IT options (elective) unit.

Business students complete 8 Business School Core Units together with 8 Major Core Units from their chosen discipline. (Accountancy students undertake 6 Business School Core Units and 10 Major Core Units to meet professional recognition requirements).

Note the following:

Cooperative Education Program

The Science and Engineering Faculty's Cooperative Education Program gives you the opportunity of 10-12 months paid industry placement during your course where you can integrate real experience with what you're learning in your degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNITAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the <u>Cooperative</u> Education Program.

Important Information for Business Students

QUT Business School rules and procedures are outlined in the <u>Business</u> <u>Undergraduate Guidelines booklet</u>. Other useful information can be found on the <u>Student Services</u> website.

Domestic Course structure Course Design

Students are required to complete 384 credit points (32 units) comprised of 192 credit points (16 units) from the Bachelor of Business program and 192 credit points (16 units) from the Bachelor of Corporate Systems Management program which includes an industry based project and an IT options (elective) unit.

Business students complete eight Business School Core Units together with eight Major Core Units from their chosen discipline. (Accountancy students undertake 6 Business School Core Units and 10 Major Core Units to meet professional recognition requirements).

Note the following:

- The units BSB115 Management and BSB126 Marketing are part of the Business component of the IX62.
- The unit MGB223 Entrepreneurship and Innovation is part of the Corporate Systems Management

component of the IX62.

International Course structure Course Design

Students are required to complete 384 credit points (32 units) comprised of 192 credit points (16 units) from the Bachelor of Business program and 192 credit points (16 units) from the Bachelor of Corporate Systems Management program which includes an industry based project and an IT options (elective) unit.

Business students complete eight Business School Core Units together with eight Major Core Units from their chosen discipline. (Accountancy students undertake 6 Business School Core Units and 10 Major Core Units to meet professional recognition requirements).

Note the following:

- The units BSB115 Management and BSB126 Marketing are part of the Business component of the IX62.
- The unit MGB223 Entrepreneurship and Innovation is part of the Corporate Systems Management component of the IX62.



QUT

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | IX63 |
| CRICOS | 063024D |
| Duration (full-time) | 4 years |
| OP | 8 |
| Rank | 84 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| International fee (indicative) | 2017: \$27,900 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Ross Brown (Games and Interactive Entertainment); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au; or, Director of Studies, QUT Business School; email: bus@qut.edu.au |
| Discipline Coordinator | Associate Prof Belinda Luke (Accountancy); Dr Louise Kelly (Advertising); Dr Radhika Lahiri (Economics); Dr Mark Doolan (Finance); Dr Ali Muhammad (Human Resource Management); Dr Shane Mathews (International Business); Dr Kavoos Mohannak (Management); Prof Larry Neale (Marketing); and Dr Anne Lane (Public Relations) Business: Student Services: (07) 3138 2050 Business: Student Services: bus@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
 - Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

• Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Course Update

This course will be offered in 2014, however the course structure is being redeveloped and is subject to university approval.

For course updates please visit www.qut.edu.au/coursechanges

Course Design

Students will be required to complete 192 credit points from the Bachelor of Games and Interactive Entertainment; and 192 credit points from the Bachelor of Business course.

Business Component: Students must complete the Business School Core Units (96 credit points) together with a 96 credit point major.

Students will undertake the two components of the double degree concurrently.

Cooperative Education Program

The Science and Engineering Faculty's Cooperative Education Program gives you the opportunity of 10-12 months paid industry placement during your course where you can integrate real experience with what you're learning in your degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNITAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the <u>Cooperative</u> <u>Education Program.</u>

Important Information for Business Students

QUT Business School rules and procedures are outlined in the <u>Business</u> <u>Undergraduate Guidelines booklet</u>. Other useful information can be found on the <u>Student Services</u> website.

Unit

Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:

Undergraduate Translation Table

If you have completed the unit(s) listed under the "Translation Unit Codes" column you are not permitted to enrol in the listed new code.

Domestic Course structure

Students will be required to complete 192 credit points from the Bachelor of Games and Interactive Entertainment; and 192 credit points from the Bachelor of Business course.

Students must complete the 96 credit point Business School core units (eight units) in the business program together with a 96 credit point major (eight units)*.

Students will undertake the two components of the double degree concurrently.

*Accounting major students complete 6 business core units and 10 accountancy major units to allow them to complete professional requirements.



International Course structure

Course Design

Students will be required to complete 192 credit points from the Bachelor of Games and Interactive Entertainment; and 192 credit points from the Bachelor of Business course.

Business Component: Students must complete the 96 credit point Business School Core Units in the Business program together with a 96 credit point minor*.

Students will undertake the two components of the double degree concurrently.

*Accounting major students complete 6 Business Core Units and 10 Accountancy major units to allow them to complete professional requirements.

QUT

Handbook

| | - |
|-----------------------------------|---|
| Year | 2018 |
| QUT code | IX69 |
| CRICOS | 064812A |
| Duration (full-time) | 4 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point, Kelvin Grove |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,600 per year full-time (96 credit points) |
| Total credit points | 384 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Program Director, School of Design (Creative Industries); SEF Enquiry (Information Technology); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Jeremy Kerr (Interactive and Visual Design); Dr Wayn Kelly (Computer Science) and Dr Erwin Fielt (Information Systems). IVD: +61 7 3138 2000; IT: +61 7 3138 8822 askqut@qut.edu.au (Interactive and Visual Design); sef.enquiry@qut.edu.au (Information Technology) |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA) of English and one of the following: Maths A, Maths B or Maths C.

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Career Outcomes

This double degree will set you up for a career in the rapidly expanding fields of contemporary communication and the application of new media technologies.

Course Structure

This course is made up of 384 credit points. Each component (i.e. Information Technology, and Interactive and Visual Design) comprises 192 credit points.

Study Areas

The Bachelor of Information Technology will not have nominated majors and minors and consequently there will not be a Study Area A shown on a graduate's parchment. Instead, it will have specialisations. The specialisation areas that will be available for students will include:

- Business Process Management
- Data Warehousing
- Digital Environments
- Enterprise Systems
- Information Management
- Network Systems
- Software Engineering
- Web Technologies

Pathways to Further Studies

In 2001, an accelerated Honours program was introduced to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year. The program allowed selected high achieving students the opportunity to undertake one postgraduate unit in the final semester of their a BIT degree (or double degree) which would be counted both for completion of the degree and towards the Honours program. The program also provided students with the opportunity to commence their Honours studies over the Summer Semester.

An alternative to the Honours program is the Master of Information Technology (Research). Students who complete a BIT degree (or double degree) with a grade point average equal to, or greater than 5 (7 point scale) and who have decided against enrolling in an Honours program, could undertake this course. In addition, students may wish to enrol in the redesigned postgraduate coursework Masters which has ten specialisations allowing students to either extend their area of interest or specialise in other areas at the Masters level.

Alternatively, on successful completion of this course you will be eligible to apply for entry into the Bachelor of Fine Arts (Honours), provided you have met entry requirements.

Cooperative Education

The Faculty of Science and Engineering's Cooperative Education Program gives you the opportunity of 10-12 months paid industry placement during your course where you can integrate real experience with what you're learning in your degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNITAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.



Bachelor of Fine Arts (Interactive and Visual Design)/Bachelor of Information Technology

Find out more about the Cooperative Education Program.

Domestic Course structure

This course is made up of 384 credit points. Each component (i.e. Information Technology, and Interactive and Visual Design) comprises 192 credit points.

Study areas

The Bachelor of Information Technology has majors in information systems and computer science. The major study area will be shown on a graduate's parchment.

Study overseas

Study overseas while gaining credit towards your QUT degree with one of our worldwide exchange partners. Overseas study can be for one or two semesters (or during the semester break) and the units you take can be in either degree area, depending on how they match with your QUT course. For more information, visit QUT student exchange.

International Course structure

Course Structure

This course is made up of 384 credit points. Each component (i.e. Information Technology, and Interactive and Visual Design) comprises 192 credit points.

Study Areas

The Bachelor of Information Technology has majors in Information Systems and Computer Sciencethe Major Study Area A will be shown on a graduate's parchment.

Study Overseas

Study overseas while gaining credit towards your QUT degree with one of our worldwide exchange partners. Overseas study can be for one or two semesters (or during the semester break) and the units you take can be in either degree area, depending on how they match with your QUT course. For more information, visit QUT student exchange.

Sample Structure **Semesters**

- Year 1, Semester 1
- Year 1, Semester 2 .
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title |
|------------------|-------|
| Year 1, Semester | r 1 |

| IFB101 | Impact of IT | |
|--------------------|-------------------------------------|--|
| IFB102 | Computer Technology Fundamentals | |
| DXB101 | Design and Creative Thinking | |
| DXB102 | Visual Communication | |
| Year 1, Semester 2 | | |
| rear i, demester | 2 | |
| IFB130 | 2 Database Management | |
| | Database | |
| IFB130 | Database Management | |

Note: Students considering studying overseas in Year 2 Semester 2 must apply by 1 November.

| apply by T November. | | |
|-------------------------|---|--|
| Year 2, Semester | | |
| IT Core Unit Opti | on | |
| IFB103 | Designing for IT | |
| DXB403 | Design for Interactive Media | |
| KNB126 | Motion Design | |
| Year 2, Semester | r 2 | |
| IT Major Unit | | |
| IT Major Unit | | |
| DXB202 | Image Production | |
| KNB136 | Visual Storytelling: Production Design | |
| Year 3, Semester | r 1 | |
| IT Major Unit | | |
| IT Major Unit | | |
| DXB301 | Interface Design | |
| DXB302 | Typographic Design | |
| Year 3, Semester | r 2 | |
| IT Major Unit | | |
| IT Major Unit | | |
| DXB401 | Advanced Web Design | |
| DXB402 | Theories of Visual Communication | |
| Year 4, Semester | r 1 | |
| IT Major Unit | | |
| IT Major Unit | | |
| DXH702 | Contemporary Issues in IVD | |
| SEMESTER 1 UNIT OPTIONS | | |
| One unit from the | | |
| Options (DXB501 | or DXB502): | |
| DXB501 | Tangible Media | |
| DXB502 | Visual Information Design | |
| Year 4, Semester 2 | | |
| IT Major Unit | | |
| IT Major Unit | | |
| DXH803 | Professional Practice for Designers | |



SEMESTER 2 UNIT OPTIONS One unit from the Semester 2 Unit Options (DXH601 or DXH602): Integrated Experience **DXH601** Design

DXH602 **Embodied Interactions**

- Year 1, Semester 1
- . Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
 Year 4, Semester 1
- Year 4, Semester 2

| CodeTitleYear 1, Semester 1IFB101Impact of ITIFB102Computer Technology FundamentalsYear 1, Semester 2IFB104Building IT SystemsIFB103Database ManagementYear 2, Semester 1IFB103Designing for ITIT Core Unit OptionYear 3, Semester 2CAB202Microprocessors and Digital SystemsYear 3, Semester 1CAB203Discrete StructuresCAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2CAB401Migh Performance and Parallel ComputingCAB402Programming ParadigmsCAB403Systems Programming Paradigms | • <u>Year 4, Semester 2</u> | | |
|--|-----------------------------|---------------------------|--|
| IFB101Impact of ITIFB102Computer Technology FundamentalsYear 1, Semester >IFB104Building IT SystemsIFB103Database ManagementYear 2, Semester >IFB103Designing for ITIT Core Unit OptiorYear 2, Semester >CAB201Programming PrinciplesCAB202Microprocessors and Digital SystemsYear 3, Semester >CAB302Discrete StructuresCAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester >CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester >IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401Programming ParadigmsCAB402Systems | Code | Title | |
| IFB102Computer Technology FundamentalsIFB102Computer Technology FundamentalsYear 1, Semester 2IFB104Building IT SystemsIFB103Database ManagementYear 2, Semester 1IFB103Designing for ITIT Core Unit OptionYear 2, Semester 2CAB201Programming PrinciplesCAB202Microprocessors and Digital SystemsYear 3, Semester 1CAB203Discrete StructuresCAB302Software DevelopmentYear 3, Semester 2CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401High Performance and Parallel ComputingCAB402Systems | Year 1, Semester | 1 | |
| IFB102Technology FundamentalsYear 1, Semester 2IFB104Building IT SystemsIFB104Database ManagementYear 2, Semester 1IFB103Designing for ITIT Core Unit OptiorYear 2, Semester 2CAB201Programming PrinciplesCAB202Microprocessors and Digital SystemsYear 3, Semester 1CAB203Discrete StructuresCAB302Software DevelopmentYear 4, Semester 2CAB301IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401SystemsCAB402Systems | IFB101 | Impact of IT | |
| IFB104Building IT SystemsIFB130Database ManagementYear 2, Semester 1IFB103Designing for ITIFB103Designing for ITIT Core Unit OptiorYear 2, Semester 2CAB201Programming PrinciplesCAB202Microprocessors and Digital SystemsYear 3, Semester 1CAB203Discrete StructuresCAB302Software DevelopmentYear 3, Semester 2CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401High Performance and Parallel ComputingCAB403Systems | IFB102 | Technology | |
| IFB130Database ManagementIFB103Designing for ITIFB103Designing for ITIT Core Unit OptionYear 2, Semester 2CAB201Programming PrinciplesCAB202Microprocessors and Digital SystemsYear 3, Semester 1CAB203CAB302Discrete StructuresCAB302Software DevelopmentYear 3, Semester 2CAB303CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301CAB301Capstone Project (Phase 1)Year 4, Semester 2Capstone Project (Phase 2)Select one of:Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401Programming ParadigmsCAB402Systems | Year 1, Semester | 2 | |
| IFB130ManagementYear 2, Semester 1IFB103Designing for ITIT Core Unit OptionYear 2, Semester 2CAB201Programming PrinciplesCAB202Microprocessors and Digital SystemsYear 3, Semester 1CAB203Discrete StructuresCAB302Software DevelopmentYear 3, Semester 2CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401Programming ParadigmsCAB403Systems | IFB104 | Building IT Systems | |
| IFB103Designing for ITIT Core Unit OptionYear 2, Semester 2CAB201Programming PrinciplesCAB202Microprocessors and Digital SystemsYear 3, Semester 1CAB203Discrete StructuresCAB302Software DevelopmentYear 3, Semester 2CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401High Performance and ParadigmsCAB402Programming Paradigms | IFB130 | | |
| IT Core Unit OptionYear 2, Semester 2CAB201Programming PrinciplesCAB202Microprocessors and Digital SystemsYear 3, Semester 1CAB203Discrete StructuresCAB302Software DevelopmentYear 3, Semester 2CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401High Performance and ParadigmsCAB403Systems | Year 2, Semester | 1 | |
| Year 2, Semester 2CAB201Programming PrinciplesCAB202Microprocessors and Digital SystemsYear 3, Semester 1CAB203Discrete StructuresCAB302Software DevelopmentYear 3, Semester 2CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401High Performance and ParadigmsCAB403Systems | IFB103 | Designing for IT | |
| CAB201Programming PrinciplesCAB202Microprocessors and Digital SystemsYear 3, Semester 1CAB203Discrete StructuresCAB302Software DevelopmentYear 3, Semester 2CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401High Performance and Parallel ComputingCAB402Programming ParadigmsCAB403Systems | IT Core Unit Optio | n | |
| CAB201Programming PrinciplesCAB202Microprocessors and Digital SystemsYear 3, Semester 1CAB203Discrete StructuresCAB302Software DevelopmentYear 3, Semester 2CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401High Performance and Parallel ComputingCAB402Programming ParadigmsCAB403Systems | Year 2, Semester | 2 | |
| CAB202Digital SystemsYear 3, Semester 1CAB203Discrete StructuresCAB302Software DevelopmentYear 3, Semester 2CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401Programming ParadigmsCAB403Systems | | Programming | |
| CAB203Discrete StructuresCAB302Software DevelopmentYear 3, Semester 2CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401High Performance and ParadigmsCAB403Systems | CAB202 | | |
| CAB302Software DevelopmentYear 3, Semester 2CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401High Performance and ParadigmsCAB403Systems | Year 3, Semester | 1 | |
| CAB302DevelopmentYear 3, Semester 2CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:High Performance and Parallel ComputingCAB401High Performance and ParadigmsCAB403Systems | CAB203 | Discrete Structures | |
| CAB303NetworksIFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:ECAB401High Performance and Parallel ComputingCAB402Programming ParadigmsCAB403Systems | CAB302 | | |
| IFB299IT Project Design and DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:ECAB401High Performance and Parallel ComputingCAB402Programming ParadigmsCAB403Systems | Year 3, Semester | 2 | |
| IFB299DevelopmentYear 4, Semester 1CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:CAB401High Performance and Parallel ComputingCAB402Programming ParadigmsCAB403Systems | CAB303 | Networks | |
| CAB301Algorithms and ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:CAB401High Performance and Parallel ComputingCAB402Programming ParadigmsCAB403Systems | IFB299 | | |
| CAB301ComplexityIFB398Capstone Project (Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:CAB401High Performance and Parallel ComputingCAB402Programming ParadigmsCAB403Systems | Year 4, Semester | 1 | |
| IPB390(Phase 1)Year 4, Semester 2IFB399Capstone Project (Phase 2)Select one of:CAB401High Performance and Parallel ComputingCAB402Programming ParadigmsCAB403Systems | CAB301 | | |
| IFB399Capstone Project (Phase 2)Select one of:CAB401High Performance and Parallel ComputingCAB402Programming ParadigmsCAB403Systems | IFB398 | | |
| IFB399(Phase 2)Select one of:High Performance and Parallel ComputingCAB401Programming ParadigmsCAB403Systems | Year 4, Semester 2 | | |
| CAB401High Performance and Parallel ComputingCAB402Programming ParadigmsCAB403Systems | IFB399 | | |
| CAB401and Parallel ComputingCAB402Programming ParadigmsCAB403Systems | Select one of: | | |
| CAB402 Paradigms CAB403 Systems | CAB401 | and Parallel Computing | |
| | CAB402 | | |
| | CAB403 | - | |

Bachelor of Fine Arts (Interactive and Visual Design)/Bachelor of Information Technology

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
 Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
 Year 4, Semester 1
 Year 4, Semester 2

| Code | Title |
|---------------------|--------------------------------------|
| Year 1, Semester 1 | |
| IFB101 | Impact of IT |
| | Computer |
| IFB102 | Technology |
| | Fundamentals |
| Year 1, Semester 2 | |
| IFB104 | Building IT Systems |
| IFB130 | Database |
| | Management |
| Year 2, Semester 1 | |
| IFB103 | Designing for IT |
| IT Core Unit Option | |
| Year 2, Semester 2 | |
| 14 0004 | Modelling |
| IAB201 | Information Systems |
| | Business of |
| IAB202 | Information |
| | Technology |
| Year 3, Semester 1 | |
| IAB203 | Business Process |
| | Modelling |
| IAB204 | Business Analysis |
| Year 3, Semester 2 | |
| IAB205 | Corporate Systems |
| IFB299 | IT Project Design and Development |
| Voor 4 Somostor 1 | and Development |
| Year 4, Semester 1 | Constana Braiset |
| IFB398 | Capstone Project (Phase 1) |
| Select one of: | (********) |
| | Information |
| IAB302 | Systems Consulting |
| IAB303 | Business |
| IAD303 | Intelligence |
| IAB304 | Project |
| | Management |
| Year 4, Semester 2 | |
| IAB301 | Enterprise Architecture |
| | Capstone Project |
| IFB399 | (Phase 2) |
| | . , |

QUI

Handbook

| Year | 2018 |
|------------------------------|---|
| QUT code | IX72 |
| CRICOS | 066294B |
| Duration (full-time) | 5.5 years |
| OP | 5 |
| Rank | 92 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Total credit points | 528 |
| Credit points full-time sem. | 48 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Marion Bateson (Science); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au; Law: Director of Undergraduate Programs - Peter Black |
| Discipline Coordinator | Dr Perry Hartfield (Biochemistry); Dr Marion Bateson (Biotechnology); Associate Professor Dennis Arnold (Chemistry); Dr Ian Williamson (Ecology); Dr Ian Williamson (Ecology); Dr Ian Williamson (Environmental Science); Dr Emad Kirjakous (Forensic Science); Dr Craig Sloss (Geoscience); Dr Christine Knox (Microbiology); Dr Stephen Hughes (Physics); Law Curriculum Dr Anna Huggins; Law Students Jennifer Yule Law: +61 7 3138 2707 Science: +61 7 3138 8822; sef.enquiry@qut.edu.au; Law: law_enquiries@qut.edu.a |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (English (4, SA) and Maths B (4, SA)).

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies (English (4, SA) and Maths B (4, SA)).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking 6.0 | |

Professional Recognition

Graduates will satisfy the requirements for membership in the relevant professional body for their science major. See <u>Studyfinder</u> for details on the Bachelor of Applied Science majors.

At the end of your Law degree you will have completed the necessary units for admission to legal practice in Australia. To become a practising lawyer you will need to complete further practical legal training (e.g. Graduate Diploma in Legal Practice) and then apply for admission.

Course Design

The course is designed to cover all major areas of the law as well as allowing students to choose any of the following science majors that are offered in the Bachelor of Applied Science (SC01) course: biochemistry, biotechnology, chemistry, ecology, environmental science, forensic science, geoscience, microbiology and physics. To complete the double degree in a shorter period of time, the co-major will be taken from the law program therefore it is not possible for students to choose any of the co-majors listed under the Bachelor of Applied Science course.

Domestic Course structure Course structure

You will study a combination of science and law units in the first four years, with law units only in the final years. You will also have the opportunity to choose elective units relevant to your career interests.

Course design

The course is designed to cover all major areas of the law as well as allowing students to choose any of the following science majors that are offered in the Bachelor of Applied Science (SC01) course:

- biochemistry
- biotechnology
- chemistry
- ecology
- environmental science
- forensic science
- geoscience
- microbiologyphysics.

To complete the double degree in a shorter period of time, the co-major will be taken from the law program therefore it is not possible for students to choose any of the co-majors listed under the Bachelor of Applied Science course.

International Course structure

Course structure

You will study a combination of science and law units in the first four years, with law units only in the final years. You will also have the opportunity to choose elective units relevant to your career interests.

Course design

The course is designed to cover all major areas of the law as well as allowing students to choose any of the following science majors that are offered in the Bachelor of Applied Science (SC01) course:

- biochemistry
- biotechnology
- chemistry
- ecology
- environmental science
- forensic science
- geoscience



Bachelor of Applied Science/Bachelor of Laws

- microbiology
- physics.

To complete the double degree in a shorter period of time, the co-major will be taken from the law program therefore it is not possible for students to choose any of the co-majors listed under the Bachelor of Applied Science course.

Sample Structure

The new Bachelor of Laws (Honours) is effective from semester 1, 2015. As a result of this new course, some of the unit codes have changed to LLBxxx. Your study plan will be updated to reflect these changes. For information regarding these changes, please refer to the QUT Real Law (LAW_Real_Law) Blackboard site under My Community on your blackboard homepage or contact

<u>law_enquiries@qut.edu.au</u> for further information.

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
 Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Year 5, Semester 1
- Year 5, Semester 2
- Year 6, Semester 1
- <u>Elective Information</u>

| Code | Title | |
|--------------------------|---------------------------------------|--|
| Year 1 Semester 1 | | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Law Core Unit | | |
| Law Core Unit | | |
| Year 1 Semester 2 | | |
| Science Core Unit Option | | |
| Science Core Unit Option | | |
| Law Core Unit | | |
| Law Core Unit | | |
| Year 2, Semester 1 | | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Law Core Unit | | |

Law Core Unit Year 2, Semester 2 Science Major Unit Science Major Unit Law Core Unit Law Core Unit Year 3, Semester 1 Science Major Unit Science Major Unit Law Core Unit Law Core Unit Year 3, Semester 2 Science Major Unit Science Major Unit Law Core Unit Law Core Unit Year 4, Semester 1 Science Major Unit Science Major Unit Law Core Unit Law Core Unit Year 4, Semester 2 Science Major Unit Science Major Unit Law Core Unit Law Core Unit Year 5, Semester 1 Law Core Unit Law Core Unit Law General Elective Law General Elective Year 5, Semester 2 Law Core Unit Law General Elective Law General Elective Law General Elective Year 6, Semester 1 Law General Elective Law General Elective Law General Elective Law General Elective Elective Information Students may complete up to 4 non-law electives.

The new Bachelor of Laws (Honours) is effective from semester 1, 2015. As a result of this new course, some of the unit codes have changed to LLBxxx. Your study plan will be updated to reflect these changes. For information regarding these changes, please refer to the QUT Real Law (LAW_Real_Law) Blackboard site under My Community on your blackboard homepage or contact law_enquiries@qut.edu.au for further information.

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

| Introductory Law Electives | |
|----------------------------|--------------------------------------|
| Code | Title |
| LLB140 | Human Rights Law |
| LLB141 | Introduction to International Law |
| LLB142 | Regulation of Business |

The new Bachelor of Laws (Honours) is effective from semester 1, 2015. As a result of this new course, some of the unit codes have changed to LLBxxx. Your study plan will be updated to reflect these changes. For information regarding these changes, please refer to the QUT Real Law (LAW_Real_Law) Blackboard site under My Community on your blackboard homepage or contact

<u>law enquiries@qut.edu.au</u> for further information.

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

| General Law Electives List | | |
|----------------------------|--|--|
| Code | Title | |
| LLB240 | Chinese Legal System | |
| LLB241 | Discrimination and Equal Opportunity Law | |
| LLB242 | Media Law | |
| LLB243 | Family Law | |
| LLB244 | Criminal Law Sentencing | |
| LLB245 | Sports Law | |
| LLB246 | Principles of Labour Law | |
| LLB340 | Banking and Finance Law | |
| LLB341 | Artificial Intelligence, Robots and the Law | |
| LLB342 | Immigration and Refugee Law | |
| LLB344 | Intellectual Property Law | |
| LLB345 | Internet Law | |
| LLB346 | Succession Law | |
| LLB347 | Taxation Law | |
| LLB348 | Socio-Legal Research Methods | |



Bachelor of Applied Science/Bachelor of Laws

| Japanese Law |
|--------------------------------------|
| The Law and Ethics of War |
| Environmental Law |
| Mining and Resources Law |
| Real Estate Transactions |
| Private International Law |
| International Arbitration |
| Competition Moots A |
| Competition Moots B |
| Learning in Professional Practice |
| Legal Clinic (Organised Program) |
| Legal Clinic (International) |
| |

The new Bachelor of Laws (Honours) is effective from semester 1, 2015. As a result of this new course, some of the unit codes have changed to LLBxxx. Your study plan will be updated to reflect these changes. For information regarding these changes, please refer to the QUT Real Law (LAW_Real_Law) Blackboard site under My Community on your blackboard homepage or contact

 $\underline{law_enquiries@qut.edu.au} \ for \ further information.$

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

| Advanced Law Electives | |
|------------------------|---|
| Code | Title |
| LLH470 | Commercial Contracts in Practice |
| LLH471 | Health Law and Practice |
| LLH472 | Public International Law |
| LLH473 | Independent Research Project |
| LLH474 | Insolvency Law |
| LLH475 | Theories of Law |
| LLH476 | Competition Law |
| LLH477 | Innovation and Intellectual Property Law |
| LLH478 | Advanced Criminal Law - Principles and Practice |

clli

Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | IX80 |
| CRICOS | 083029M |
| Duration (full-time) | 5.5 years |
| OP | 6 |
| Rank | 89 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$10,100 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$31,600 per year full-time (96 credit points) |
| Total credit points | 528 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Graham Johnson (Science); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au; Law: Director of Undergraduate Programs - Peter Black |
| Discipline Coordinator | Dr Marion Bateson (Biological Science); Dr James Blinco (Chemistry); Dr Luke Nothdurft (Earth Science); Dr Andrew Baker (Environmental Science); and Prof Nunzio Motto (Physics); Law: Director of Undergraduate Programs - Peter Black Science: +61 7 3138 8822; Law: +61 7 3138 2707 Science: sef.enquiry@qut.edu.au; Law: law_enquiries@qut.edu.a u |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

Recommended Study: At least one of Chemistry, Physics, Biology, Geography, Earth Science or Maths C. We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: At least one of Chemistry, Physics, Biology, Geography, Earth Science or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Structure Information

Students are required to complete 528 credit points, comprised of 192 credit points for the Bachelor of Science program and 336 credit points for the Bachelor of Laws program. You will study science and law units in your first four years and for the remainder of this course you will concentrate on law studies.

Under the Science component students will complete 16 units in total. Students will choose any of the following science majors that are offered in the Bachelor of Science (ST01) course: biology, chemistry, earth science, environmental science and physics.

Under the Law component students will complete 336 credit points of core units and a mixture of Introductory, General and Advanced Electives. Students may select up to 48 credit points of non-law electives or 48 credit points of a University-wide minor in place of four of the General Electives. Successful completion of a minor will be recognised on the Academic Record and / or the Australian Higher Education Graduation Statement.

Total Law credit points: 336 Total credit points for core units: 240 Total credit points for elective units: 96 Honours Level Units

96 credit points of Honours units listed below will be used to determine the Honours Levels of the LLB (Hons): LLH201 Legal Research, LLH206 Administrative Law, LLH302 Ethics and the Legal Profession, LLH305 Corporate Law, LLH401 Legal Research Capstone (24 cps) and two Advanced Electives in law.

Professional Recognition

The QUT LLB (Hons) is an approved degree for the purposes of the Legal Practitioners Admission Rules. Accordingly, it enables graduates to satisfy the academic requirements for admission to practise as a solicitor and/or barrister in all Australian states and territories.

Graduates will satisfy the requirements for membership in the relevant professional body for their science major.

Admission to practice

If, at the end of your degree, you wish to become a legal practitioner, you will need to complete further practical legal training (PLT). QUT also offers PLT in the form of the Graduate Diploma in Legal Practice.

Career Outcomes

As a graduate, you may enter legal practice with an education in both the content and process of science and data analysis that will enable you to deal with the complexities of litigation that have a scientific and technological dimension, such as inventions, trade secrets, quantitative evidence, and constitutional disputes giving rise to environmental issues. On the other hand, you may choose to follow a career path in the sciences, enhancing your opportunities in a particular discipline such as environmental science or biotechnology through your knowledge of the law.

You will graduate with specialised knowledge of cutting-edge technologies



Bachelor of Science/Bachelor of Laws (Honours)

and extensive practical experience using the latest techniques. You have a broad range of options to choose from and the flexibility to create your own personal science degree program.

In developing the LLB (Hons) the Faculty recognises that graduates are increasingly seeking a broad range of careers including, but not limited to, legal practice. The defining nature of the QUT LLB (Hons) is its real-world applied nature which will equip you with advanced knowledge and research and other skills and that meet the needs of not only the legal profession, but also government, community organisations, business and industry.

The LLB (Hons) provides students with an opportunity to advance their knowledge of law in specialised areas through the elective units offered as part of the course. The elective units allow you to study areas of the law that match your career aspirations.

Career opportunities include working in general legal practice, specialist legal practice, government departments and employment in private enterprise.

Non-standard attendance

Field work is a requirement in some areas of science.

Deferment

Domestic students can defer their offer in this course for one year. In exceptional circumstances up to 12 months of additional deferment may be granted.

Find out more at deferment

Domestic Course structure

Students are required to complete 528 credit points, comprised of 192 credit points for the Bachelor of Science program and 336 credit points for the Bachelor of Laws program. You will study science and law units in your first four years and for the remainder of this course you will concentrate on law studies.

Under the Science component students will complete 16 units in total. Students will choose any of the following science majors that are offered in the <u>Bachelor of Science</u> (ST01) course: biology, chemistry, earth science, environmental science and physics.

Under the Law component students will complete 336 credit points of core units and a mixture of Introductory, General and Advanced Electives. Students may select up to 48 credit points of non-law electives or 48 credit points of a University-wide minor in place of four of the general electives. Successful completion of a minor will be recognised on the Academic Record and / or the Australian Higher Education Graduation Statement.

Total Law credit points: 336 Total credit points for core units: 240 Total credit points for elective units: 96

Honours Level Units

96 credit points of Honours units listed below will be used to determine the Honours Levels of the LLB (Hons): LLH201 Legal Research, LLH206 Administrative Law, LLH302 Ethics and the Legal Profession, LLH305 Corporate Law, LLH401 Legal Research Capstone (24 cps) and two Advanced Electives in law.

International Course

structure

Students are required to complete 528 credit points, comprised of 192 credit points for the Bachelor of Science program and 336 credit points for the Bachelor of Laws program. You will study science and law units in your first four years and for the remainder of this course you will concentrate on law studies.

Under the Science component students will complete 16 units in total. Students will choose any of the following science majors that are offered in the <u>Bachelor of Science</u>.(ST01) course: biology, chemistry, earth science, environmental science and physics.

Under the Law component students will complete 336 credit points of core units and a mixture of Introductory, General and Advanced Electives. Students may select up to 48 credit points of non-law electives or 48 credit points of a University-wide minor in place of four of the General Electives. Successful completion of a minor will be recognised on the Academic Record and / or the Australian Higher Education Graduation Statement.

Total Law credit points: 336 Total credit points for core units: 240 Total credit points for elective units: 96

Honours Level Units

96 credit points of Honours units listed below will be used to determine the Honours Levels of the LLB (Hons): LLH201 Legal Research, LLH206 Administrative Law. LLH302 Ethics and the Legal Profession, LLH305 Corporate Law, LLH401 Legal Research Capstone (24 cps) and two Advanced Electives in law.

Sample Structure

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2
- Year 6 Semester 1
 Law Elective Information*

| Code | Title | |
|--|---|--|
| Year 1 Semester 1 | | |
| LLB101 | Introduction to Law | |
| LLB102 | Torts | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 1 Sem | ester 2 | |
| LLB105 | Legal Problems and Communication | |
| LLB106 | Criminal Law | |
| Science Cor | e Unit Option | |
| Science Major Option Unit (for Biology, Earth Science, Environmental Science) or MXB100 (Chemistry and Physics) | | |
| For 2019, LLB107 Statutory Interpretation replaces LLB105 Legal Problems and Communication | | |
| Year 2 Semester 1 | | |
| | ester 1 | |
| Year 2 Sem LLB103 | ester 1 Dispute Resolution | |
| | | |
| LLB103 | Dispute Resolution Contemporary Law and | |
| LLB103 LLB104 | Dispute Resolution Contemporary Law and Justice Grand Challenges in | |
| LLB103 LLB104 SEB104 | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science | |
| LLB103 LLB104 SEB104 SEB113 | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science | |
| LLB103 LLB104 SEB104 SEB113 Year 2 Semu LLH201 | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science ester 2 | |
| LLB103 LLB104 SEB104 SEB113 Year 2 Semu LLH201 | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science ester 2 Legal Research Law Elective | |
| LLB103 LLB104 SEB104 SEB113 Year 2 Semu LLH201 Introductory | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science ester 2 Legal Research Law Elective or Unit | |
| LLB103 LLB104 SEB104 SEB113 Year 2 Sem LLH201 Introductory Science Maj | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science ester 2 Legal Research Law Elective or Unit or Unit | |
| LLB103 LLB104 SEB104 SEB113 Year 2 Sem LLH201 Introductory Science Maj Science Maj | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science ester 2 Legal Research Law Elective or Unit or Unit | |
| LLB103 LLB104 SEB104 SEB113 Year 2 Semu LLH201 Introductory Science Maj Science Maj Year 3 Semu | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science ester 2 Legal Research Law Elective or Unit or Unit ester 1 | |



Bachelor of Science/Bachelor of Laws (Honours)

| Science Major Unit | | |
|--|--|--|
| Year 3 Sem | ester 2 | |
| LLB204 | Commercial and Personal Property Law | |
| LLB205 | Equity and Trusts | |
| Science Maj | or Unit | |
| Science Maj | or Unit | |
| Year 4 Sem | ester 1 | |
| LLB301 | Real Property Law | |
| General Law | / Elective | |
| Science Maj | or Unit | |
| Science Maj | or Unit | |
| Year 4 Sem | ester 2 | |
| LLB303 | Evidence | |
| LLH206 | Administrative Law | |
| Science Maj | or Unit | |
| Science Maj | or Unit | |
| Year 5 Sem | ester 1 | |
| LLH302 | Ethics and the Legal Profession | |
| LLB304 | Commercial Remedies | |
| | v Elective or Non-law Jniversity-wide Minor Unit* | |
| | VElective or Non-law Iniversity-wide Minor Unit* | |
| Year 5 Sem | - | |
| LLB306 | Civil Procedure | |
| LLH305 | Corporate Law | |
| General Law Elective or Non-law Elective or University-wide Minor Unit* | | |
| General Law Elective or Non-law Elective or University-wide Minor Unit* | | |
| Year 6 Sem | ester 1 | |
| LLH401 | Legal Research Capstone | |
| Advanced La | | |
| Advanced Law Elective | | |
| Law Elective Information* | | |
| Law students may complete up to 4 non- law electives or a university wide minor comprised of 4 units in place of the equivalent number of general law electives. | | |
| Semesters • Year 1. | Semester 2 | |

- Year 1, Semester 2
- Year 2, Semester 1
 Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 ٠
- Year 4, Semester 2 • Year 5, Semester 1
- Year 5, Semester 2
- ٠
- Year 6, Semester 1 . Year 6, Semester 2
- *Law Elective Information •

Title Code Year 1, Semester 2

| LLB101 | Introduction to Law |
|---|--|
| LLB102 | Torts |
| Year 2, Sem | nester 1 |
| LLB103 | Dispute Resolution |
| LLB104 | Contemporary Law and Justice |
| Year 2, Sem | nester 2 |
| | Legal Problems and |
| LLB105 | Communication |
| LLB106 | Criminal Law |
| Year 3, Sem | |
| LLB202 | Contract Law |
| LLH201 | Legal Research |
| Year 3, Sem | nester 2 |
| LLB204 | Commercial and Personal Property Law |
| Introductory | Law Elective |
| Year 4, Sem | nester 1 |
| LLB203 | Constitutional Law |
| General Law | v Elective |
| Year 4, Sem | nester 2 |
| LLB205 | Equity and Trusts |
| LLH206 | Administrative Law |
| Year 5, Sem | |
| | |
| | |
| LLB301 | Real Property Law |
| LLB301 General Lav Elective or U | Real Property Law v Elective or Non-law Jniversity-wide Minor Unit* |
| LLB301 General Lav Elective or U Year 5, Sem | Real Property Law v Elective or Non-law Jniversity-wide Minor Unit* nester 2 |
| LLB301 General Lav Elective or U Year 5, Sem LLB303 | Real Property Law v Elective or Non-law Jniversity-wide Minor Unit* nester 2 Evidence |
| LLB301 General Lav Elective or U Year 5, Sem | Real Property Law v Elective or Non-law University-wide Minor Unit* nester 2 Evidence Civil Procedure |
| LLB301 General Lav Elective or U Year 5, Sem LLB303 | Real Property Law v Elective or Non-law Jniversity-wide Minor Unit* nester 2 Evidence |
| LLB301 General Law Elective or L Year 5, Sem LLB303 LLB306 LLH305 General Law | Real Property Law v Elective or Non-law Jniversity-wide Minor Unit* nester 2 Evidence Civil Procedure Corporate Law v Elective or Non-law |
| LLB301 General Lav Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Lav Elective or U | Real Property Law v Elective or Non-law Jniversity-wide Minor Unit* nester 2 Evidence Civil Procedure Corporate Law v Elective or Non-law Jniversity-wide Minor Unit* |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem | Real Property Law v Elective or Non-law University-wide Minor Unit* nester 2 Evidence Civil Procedure Corporate Law v Elective or Non-law University-wide Minor Unit* |
| LLB301 General Lav Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Lav Elective or U | Real Property Law v Elective or Non-law University-wide Minor Unit* nester 2 Evidence Civil Procedure Corporate Law v Elective or Non-law University-wide Minor Unit* nester 1 Commercial Remedies |
| LLB301 General Lav Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Lav Elective or U Year 6, Sem LLB304 LLH302 | Real Property Lawv Elective or Non-lawJniversity-wide Minor Unit*vester 2EvidenceCivil ProcedureCorporate Lawv Elective or Non-lawUniversity-wide Minor Unit*vester 1Commercial RemediesEthics and the LegalProfession |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law | Real Property Law VElective or Non-law University-wide Minor Unit* Vester 2 Evidence Civil Procedure Corporate Law VELective or Non-law University-wide Minor Unit* Nester 1 Commercial Remedies Ethics and the Legal Profession VELective or Non-law |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U | Real Property Law VElective or Non-law University-wide Minor Unit* Vester 2 Evidence Civil Procedure Corporate Law VElective or Non-law University-wide Minor Unit* Vester 1 Commercial Remedies Ethics and the Legal Profession VElective or Non-law University-wide Minor Unit* |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law | Real Property Law V Elective or Non-law University-wide Minor Unit* Vester 2 Evidence Civil Procedure Corporate Law V Elective or Non-law University-wide Minor Unit* Nester 1 Commercial Remedies Ethics and the Legal Profession |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law | Real Property Law V Elective or Non-law University-wide Minor Unit* Vester 2 Evidence Civil Procedure Corporate Law V Elective or Non-law University-wide Minor Unit* Nester 1 Commercial Remedies Ethics and the Legal Profession V Elective or Non-law University-wide Minor Unit* V Elective or Non-law |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law Elective or U | Real Property Law V Elective or Non-law University-wide Minor Unit* Vester 2 Evidence Civil Procedure Corporate Law V Elective or Non-law University-wide Minor Unit* Nester 1 Commercial Remedies Ethics and the Legal Profession V Elective or Non-law University-wide Minor Unit* V Elective or Non-law |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law Elective or U Year 6, Sem | Real Property Lawv Elective or Non-lawJniversity-wide Minor Unit*ester 2EvidenceCivil ProcedureCorporate Lawv Elective or Non-lawJniversity-wide Minor Unit*ester 1Commercial RemediesEthics and the LegalProfessionv Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawUniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawUniversity-wide Minor Unit* |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law Elective or U General Law Elective or U Year 6, Sem | Real Property Lawv Elective or Non-lawJniversity-wide Minor Unit*ester 2EvidenceCivil ProcedureCorporate Lawv Elective or Non-lawJniversity-wide Minor Unit*ester 1Commercial RemediesEthics and the LegalProfessionv Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit* |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law Elective or U Year 6, Sem LLH401 Advanced L | Real Property Lawv Elective or Non-lawJniversity-wide Minor Unit*ester 2EvidenceCivil ProcedureCorporate Lawv Elective or Non-lawJniversity-wide Minor Unit*ester 1Commercial RemediesEthics and the LegalProfessionv Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit* |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law Elective or U Year 6, Sem LLH401 Advanced L Advanced L | Real Property Lawv Elective or Non-lawJniversity-wide Minor Unit*nester 2EvidenceCivil ProcedureCorporate Lawv Elective or Non-lawJniversity-wide Minor Unit*nester 1Commercial RemediesEthics and the LegalProfessionv Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawUniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawUniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit*v Electiveaw Electiveaw Electiveaw Electiveter Information |
| LLB301 General Law Elective or L Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or L Year 6, Sem LLB304 LLH302 General Law Elective or L General Law Elective or L General Law Elective or L Year 6, Sem LLH401 Advanced L Advanced L | Real Property Lawv Elective or Non-lawJniversity-wide Minor Unit*vester 2EvidenceCivil ProcedureCorporate Lawv Elective or Non-lawJniversity-wide Minor Unit*nester 1Commercial RemediesEthics and the LegalProfessionv Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit* |

minor comprised of 4 units in place of the equivalent number of general law electives.

Semesters

- <u>Semester 1 (February)</u>
- **commencements**
- Year 1, Semester 1
- Year 1, Semester 2

| | Voor 2 | Somostor 1 | |
|---|---------------|---------------------|--|
| • | <u>rear z</u> | <u>, Semester 1</u> | |

- Year 2, Semester 2
- Year 3, Semester 1 ٠ •
 - Year 3, Semester 2 Year 4, Semester 1
- ٠
- Year 4, Semester 2
 Semester 2 (July) commencements

| <u>Semester 2</u> | (July) commencements | |
|--------------------|--|--|
| Code | Title | |
| Semester 1 (Febr | ruary) commencements | |
| Year 1, Semester | 1 | |
| SEB115 | Experimental Science | |
| SEB116 | Experimental Science 2 | |
| Year 1, Semester | 2 | |
| Science Core Uni | it Option | |
| Science Major Ur | nit Option | |
| Year 2, Semester | 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 2, Semester | 2 | |
| BVB101 | Foundations of Biology | |
| BVB102 | Evolution | |
| Year 3, Semester | 1 | |
| BVB202 | Experimental Design and Quantitative Methods | |
| BVB301 | Animal Biology | |
| Year 3, Semester | 2 | |
| BVB201 | Biological Processes | |
| BVB204 | Ecology | |
| Year 4, Semester | 1 | |
| BVB203 | Plant Biology | |
| BVB305 | Microbiology and the Environment | |
| Year 4, Semester 2 | | |
| BVB304 | Integrative Biology | |
| BVB313 | Population Genetics and Molecular Ecology | |
| Semester 2 (July) |) commencements | |
| | | |

- <u>Semester 1 (February)</u> commencements
- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- ٠ Semester 2 (July) commencements
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1



of Laws (Honours)

| Bachelor of Se | cience/Bachelor of I | |
|--|---|--|
| • Year 3, Sem | ester 2 | |
| Year 4, Sem Yoar 4, Sem | ester 1 | |
| <u>Year 4, Sem</u> <u>Year 5, Sem</u> | ester 1 | |
| Year 5, Sem | <u>ester 2</u> | |
| Code | Title | |
| | uary) commencements | |
| Year 1, Semester | | |
| SEB115 | Experimental Science | |
| SEB116 | Experimental Science 2 | |
| Year 1, Semester | 2 | |
| MXB100 | Introductory Calculus and Algebra | |
| Science Core Unit | t Option | |
| Year 2, Semester | 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 2, Semester | 2 | |
| CVB101 | General Chemistry | |
| CVB102 | Chemical Structure and Reactivity | |
| Year 3, Semester | 1 | |
| CVB201 | Inorganic Chemistry | |
| CVB202 | Analytical Chemistry | |
| Year 3, Semester 2 | | |
| CVB203 | Physical Chemistry | |
| CVB204 | Organic Structure and Mechanisms | |
| Year 4, Semester | | |
| CVB301 | Organic Chemistry: Strategies for Synthesis | |
| | Applied Physical | |
| CVB302 | Chemistry | |
| Year 4, Semester | | |
| CVB303 | Coordination Chemistry | |
| CVB304 | Chemistry Research Project | |
| Semester 2 (July) | | |
| Year 1, Semester | | |
| SEB104 | Grand Challenges in Science | |
| MXB100 | Introductory Calculus and Algebra | |
| Year 2, Semester | | |
| SEB115 | Experimental Science | |
| SEB116 | Experimental Science 2 | |
| Year 2, Semester | 2 | |

| | and Reactivity | |
|--------------------|---|--|
| Year 3, Semester | 1 | |
| SEB113 | Quantitative Methods in Science | |
| Core Unit Option | | |
| Year 3, Semester | 2 | |
| (No Science Units |) | |
| Year 4, Semester | 1 | |
| CVB201 | Inorganic Chemistry | |
| CVB202 | Analytical Chemistry | |
| Year 4, Semester 2 | | |
| CVB203 | Physical Chemistry | |
| CVB204 | Organic Structure and Mechanisms | |
| Year 5, Semester | 1 | |
| CVB301 | Organic Chemistry: Strategies for Synthesis | |
| CVB302 | Applied Physical Chemistry | |
| Year 5, Semester 2 | | |
| CVB303 | Coordination Chemistry | |
| CVB304 | Chemistry Research Project | |

Semesters

| ٠ | Semester 1 | (February) |
|---|------------|------------|
| | | |

- <u>commencements</u> Year 1, Semester 1
- Year 1, Semester 2
 Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- ٠
- Year 3, Semester 2 Year 4, Semester 1 ٠
- Year 4, Semester 2 •
- Semester 2 (July) commencements

| Code | Title | | |
|---------------------------|---------------------------------------|--|--|
| Semester 1 (Fel | Semester 1 (February) commencements | | |
| Year 1, Semest | er 1 | | |
| SEB115 | Experimental Science 1 | | |
| SEB116 | Experimental Science 2 | | |
| Year 1, Semester 2 | | | |
| Science Core Unit Option | | | |
| Science Major Unit Option | | | |
| Year 2, Semester 1 | | | |
| SEB104 | Grand Challenges in Science | | |
| SEB113 | Quantitative Methods in Science | | |
| Year 2, Semester 2 | | | |
| ERB101 | Earth Systems | | |
| ERB102 | Evolving Earth | | |
| Year 3, Semester 1 | | | |
| ERB201 | Destructive Earth: Natural Hazards | | |
| ERB202 | Marine Geoscience | | |

| Year 3, Semester 2 | | |
|---------------------------------|---|--|
| ERB203 | Sedimentary Geology and Stratigraphy | |
| ERB204 | Deforming Earth: Fundamentals of Structural Geology | |
| Year 4, Semester 1 | | |
| ERB301 | Chemical Earth | |
| ERB302 | Applied Geophysics | |
| Year 4, Semester 2 | | |
| ERB303 | Energy Resources and Basin Analysis | |
| ERB304 | Dynamic Earth: Plate Tectonics | |
| Semester 2 (July) commencements | | |

Semesters

- Semester 1 (February) commencements
- Year 1, Semester 1
 Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- •
- Year 3, Semester 1 Year 3, Semester 2 ٠
- Year 4, Semester 1
- Year 4, Semester 2 .
- Semester 2 (July) commencements

| Code | Title | | |
|------------------|--|--|--|
| Semester 1 (Feb | ruary) commencements | | |
| Year 1, Semeste | Year 1, Semester 1 | | |
| SEB115 | Experimental Science | | |
| SEB116 | Experimental Science 2 | | |
| Year 1, Semeste | r 2 | | |
| Science Core Un | it Option | | |
| Science Major Op | otion | | |
| Year 2, Semeste | r 1 | | |
| SEB104 | Grand Challenges in Science | | |
| SEB113 | Quantitative Methods in Science | | |
| Year 2, Semeste | r 2 | | |
| ERB101 | Earth Systems | | |
| EVB102 | Ecosystems and the Environment | | |
| Year 3, Semeste | r 1 | | |
| BVB202 | Experimental Design and Quantitative Methods | | |
| EVB203 | Geospatial Information Science | | |
| Year 3, Semeste | r 2 | | |
| BVB204 | Ecology | | |
| EVB302 | Environmental Pollution | | |
| Year 4, Semester | r 1 | | |
| BVB311 | Conservation Biology | | |

General Chemistry **Chemical Structure**

CVB101

CVB102

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=IX80&courseID=32824. CRICOS No.00213J

QUI

Bachelor of Science/Bachelor of Laws (Honours)

| EVB312 | Soils and the Environment |
|--------------------|---|
| Year 4, Semester 2 | |
| ERB310 | Groundwater Systems |
| EVB304 | Case Studies in Environmental Science |
| Semester 2 (July |) commencements |

Semesters

- Semester 1 (February)
 - **commencements**
- Year 1, Semester 1 Year 1, Semester 2
- Year 2, Semester 1 ٠
- Year 2, Semester 2 •
- Year 3, Semester 1
- Year 3, Semester 2 .
- Year 4, Semester 1 .
- Year 4, Semester 2 Semester 2 (July) commencements

| • <u>Semesier 2 (July) commencements</u> | | |
|--|--|--|
| Code | Title | |
| Semester 1 (Febru | uary) commencements | |
| Year 1, Semester | 1 | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 1, Semester | 2 | |
| MXB100 | Introductory Calculus and Algebra | |
| Science Core Unit | Option | |
| Year 2, Semester | 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 2, Semester | 2 | |
| PVB101 | Physics of the Very Large | |
| PVB102 | Physics of the Very Small | |
| Year 3, Semester 1 | | |
| PVB200 | Computational and Mathematical Physics | |
| PVB203 | Experimental Physics | |
| Year 3, Semester 2 | | |
| PVB202 | Mathematical Methods in Physics | |
| PVB204 | Electromagnetism | |
| Year 4, Semester | 1 | |
| PVB301 | Materials and Thermal Physics | |
| PVB302 | Classical and Quantum Physics | |
| Year 4, Semester | 2 | |
| PVB303 | Nuclear and Particle | |

| | Physics |
|---------------------------------|------------------|
| PVB304 | Physics Research |
| Semester 2 (July) commencements | |

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on QUT Virtual.

| Introductory Law Electives | |
|----------------------------|--------------------------------------|
| Code | Title |
| LLB140 | Human Rights Law |
| LLB141 | Introduction to International Law |
| LLB142 | Regulation of Business |

Please note that some law elective units maybe offered in alternate years and/or are subject to student enrolments. Please refer QUT Real Law (LAW_Real_Law) Blackboard site under My Community on your blackboard homepage for unit offerings to determine which units will be available.

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on QUT Virtual.

| General Law Electives List | | |
|----------------------------|--|--|
| Code | Title | |
| LLB240 | Chinese Legal System | |
| LLB241 | Discrimination and Equal Opportunity Law | |
| LLB242 | Media Law | |
| LLB243 | Family Law | |
| LLB244 | Criminal Law Sentencing | |
| LLB245 | Sports Law | |
| LLB246 | Principles of Labour Law | |
| LLB340 | Banking and Finance Law | |
| LLB341 | Artificial Intelligence, Robots and the Law | |
| LLB342 | Immigration and Refugee Law | |
| LLB344 | Intellectual Property Law | |
| LLB345 | Internet Law | |
| LLB346 | Succession Law | |
| LLB347 | Taxation Law | |
| LLB348 | Socio-Legal Research Methods | |
| LLB349 | Japanese Law | |

The Law and Ethics LLB350 of War **Environmental Law** LLB440 Mining and LLB443 **Resources Law Real Estate** LLB444 Transactions Private International LLB446 Law International LLB447 Arbitration LLB460 Competition Moots A LLB461 Competition Moots B Learning in LLB462 **Professional Practice** Legal Clinic LLB463 (Organised Program) International Legal LLB464 Placement

LLB464 was previously titled Legal Clinic (International)

The new Bachelor of Laws (Honours) is effective from semester 1, 2015. As a result of this new course, some of the unit codes have changed to LLBxxx. Your study plan will be updated to reflect these changes. For information regarding these changes, please refer to the QUT Real Law (LAW_Real_Law) Blackboard site under My Community on your blackboard homepage or contact

law_enquiries@qut.edu.au for further information.

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on QUT Virtual.

| Advanced Law Electives | |
|------------------------|---|
| Code | Title |
| LLH470 | Commercial Contracts in Practice |
| LLH471 | Health Law and Practice |
| LLH472 | Public International Law |
| LLH473 | Independent Research Project |
| LLH474 | Insolvency Law |
| LLH475 | Theories of Law |
| LLH476 | Competition Law |
| LLH477 | Innovation and Intellectual Property Law |
| LLH478 | Advanced Criminal Law - Principles and Practice |

You can access details about University

QUI

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.gut.edu.au/enrolment/courses/courseCode=IX80&courseID=32824. CRICOS No.00213J

wide minor options from: http://www.student.qut.edu.au/studying/un its/university-wide-minors

Please note that students should allow 3 semesters to complete a minor to account for semesters of offering and any pre-requisite requirements.

| Course Notes | |
|--------------|-------|
| Code | Title |

QUT

Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | IX87 |
| CRICOS | 083025D |
| Duration (full-time) | 5.5 years |
| OP | 6 |
| Rank | 89 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$10,100 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$28,900 per year full-time (96 credit points) |
| Total credit points | 528 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry (Information Technology); ph: 61 7 3138 8822; email: sef.enquiry@qut.edu.au; or, Law: Dr Anna Huggins (Curriculum) and Jen Yule (Students) Iaw_enquiries@qut.edu.a u or phone 61 7 3138 2707 |
| Discipline Coordinator | Law: Dr Anna Huggins (Curriculum) and Jennifer Yule (Students); IT: Dr Wayne Kelly (Computer Science); and Dr Erwin Fielt (Information Systems). Law: +61 7 3138 2707; IT: +61 7 3138 8822 Law: law_enquiries@qut.edu.a u; IT: sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
 - Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking 6.0 | |

Course structure information

Students are required to complete 528 credit points, comprised of 192 credit points for the Bachelor of Information Technology program and 336 credit points for the Bachelor of Laws program.

Requirements for the completion of the Bachelor of Information Technology component are as follows:

(a) 72 credit points (6 units) of IT Core units, which includes 24 credit points (2 units) of Option Units selected from an approved list.

(b) 120 credit points (10 units) of Major Core units

Information Technology Majors Choose your primary area of study, also known as your major, in the following specialisation areas: Information Systems or Computer Science.

Information Technology Options List The Bachelor of Information Technology Core Unit Options List comprises a range of units from which you choose to undertake two (2). The options include introductory units from a wide variety of disciplines offered at QUT.

Under the Law component students will complete 336 credit points of core units and a mixture of Introductory, General and Advanced Electives. Students may select up to 48 credit points of non-law electives or 48 credit points of a University-wide minor in place of four of the General Electives. Successful completion of a minor will be recognised on the Academic Record and / or the Australian Higher Education Graduation Statement.

Total Law credit points: 336 Total credit points for core units: 240 Total credit points for elective units: 96

Honours Level Units 96 credit points of Honours units listed below will be used to determine the Honours Levels of the LLB (Hons): LLH201 Legal Research, LLH206 Administrative Law, LLH302 Ethics and the Legal Profession, LLH305 Corporate Law, LLH401 Legal Research Capstone (24 cps) and two Advanced Electives in law.

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

The QUT LLB (Hons) is an approved degree for the purposes of the Legal Practitioners Admission Rules. Accordingly, it enables graduates to satisfy the academic requirements for admission to practise as a solicitor and/or barrister in all Australian states and territories.

Admission to practice

If, at the end of your degree, you wish to become a legal practitioner, you will need to complete further practical legal training (PLT). QUT also offers PLT in the form of the Graduate Diploma in Legal Practice.

Career Outcomes

Graduates may develop careers in cyberlaw, intellectual property and privacy, dealing with the legal regulation of the Internet including downloading music, mobile phone camera use or copyright issues. You may become a legal practitioner, barrister, in-house counsel, government lawyer or policy



adviser. There is also increased demand for roles in edemocracy both in egovernment service delivery and political campaigning.

In developing the LLB (Hons) the Faculty recognises that graduates are increasingly seeking a broad range of careers including, but not limited to, legal practice. The defining nature of the QUT LLB (Hons) is its real-world applied nature which will equip you with advanced knowledge and research and other skills and that meet the needs of not only the legal profession, but also government, community organisations, business and industry.

The LLB (Hons) provides students with an opportunity to advance their knowledge of law in specialised areas through the elective units offered as part of the course. The elective units allow you to study areas of the law that match your career aspirations.

Career opportunities include working in general legal practice, specialist legal practice, government departments and employment in private enterprise.

Pathways to Further Studies

The QUT Bachelor of Information Technology is located at Level 7 of the Australian Qualifications Framework (AQF). Eligible graduates may continue their studies in this discipline with an additional honours year in (IN10) Bachelor of Information Technology (Honours).

On successful completion of the Bachelor of Laws, there are a number of further study options open to you. The Bachelor of Laws meets the entry requirements for Practical Legal Training courses (for example, the QUT Graduate Diploma in Legal Practice). In addition, successful completion of the law degree will allow you to pursue postgraduate opportunities through research- and coursework-based higher degrees in law.

Deferment

Domestic students can defer their offer in this course for one year. In exceptional circumstances up to 12 months of additional deferment may be granted.

Find out more at deferment

Domestic Course structure

Students are required to complete 528 credit points, comprised of 192 credit points for the Bachelor of Information Technology program and 336 credit points for the Bachelor of Laws program. Requirements for the completion of the Bachelor of Information Technology component are as follows:

- 1. 72 credit points (6 units) of IT Core units, which includes 24 credit points (2 units) of Option Units selected from an approved list.
- (b) 120 credit points (10 units) of Major Core units

Information Technology Majors Choose your primary area of study, also known as your major, in the following specialisation areas: Information Systems or Computer Science.

Information Technology Options List The Bachelor of Information Technology Core Unit Options List comprises a range of units from which you choose to undertake two (2). The options include introductory units from a wide variety of disciplines offered at QUT.

Under the Law component students will complete 336 credit points of core units and a mixture of Introductory, General and Advanced Electives. Students may select up to 48 credit points of non-law electives or 48 credit points of a University-wide minor in place of four of the General Electives. Successful completion of a minor will be recognised on the Academic Record and / or the Australian Higher Education Graduation Statement.

Total Law credit points: 336 Total credit points for core units: 240 Total credit points for elective units: 96

Honours Level Units 96 credit points of Honours units listed below will be used to determine the Honours Levels of the LLB (Hons): LLH201 Legal Research, LLH206 Administrative Law, LLH302 Ethics and the Legal Profession, LLH305 Corporate Law, LLH401 Legal Research Capstone (24 cps) and 2 x 12 cp Advanced Law Electives

International Course structure

Students are required to complete 528 credit points, comprised of 192 credit points for the Bachelor of Information Technology program and 336 credit points for the Bachelor of Laws program.

Requirements for the completion of the Bachelor of Information Technology component are as follows:

1. 72 credit points (6 units) of IT Core units, which includes 24 credit points (2 units) of Option Units selected from an approved list. (b) 120 credit points (10 units) of Major Core units

Information Technology Majors Choose your primary area of study, also known as your major, in the following specialisation areas: Information Systems or Computer Science.

Information Technology Options List The Bachelor of Information Technology Core Unit Options List comprises a range of units from which you choose to undertake two (2). The options include introductory units from a wide variety of disciplines offered at QUT.

Under the Law component students will complete 336 credit points of core units and a mixture of Introductory, General and Advanced Electives. Students may select up to 48 credit points of non-law electives or 48 credit points of a University-wide minor in place of four of the General Electives. Successful completion of a minor will be recognised on the Academic Record and / or the Australian Higher Education Graduation Statement.

Total Law credit points: 336 Total credit points for core units: 240 Total credit points for elective units: 96

Honours Level Units 96 credit points of Honours units listed below will be used to determine the Honours Levels of the LLB (Hons): LLH201 Legal Research, LLH206 Administrative Law, LLH302 Ethics and the Legal Profession, LLH305 Corporate Law, LLH401 Legal Research Capstone (24 cps) and 2 x 12 cp Advanced Law Electives.

Sample Structure

Before enrolling in an option (elective) unit, you must ensure you have met any requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
 Year 4, Semester 2
- Year 5, Semester 1
- Year 5, Semester 2
- Year 6, Semester 1

Code Title Year 1, Semester 1



LLB306

LLH305

Civil Procedure

Corporate Law

General Law Elective or Non-law Elective or University-wide Minor Unit General Law Elective or Non-law

| Dauncior of II | | |
|--|---|--|
| IFB101 | Impact of IT | |
| IFB102 | Computer Technology Fundamentals | |
| LLB101 | Introduction to Law | |
| LLB102 | Torts | |
| Year 1, Semester | r 2 | |
| IFB103 | Designing for IT | |
| IFB104 | Building IT Systems | |
| LLB105 | Legal Problems and Communication | |
| LLB106 | Criminal Law | |
| For 2019, LLB107 Statutory Interpretation replaces LLB105 Legal Problems and Communication | | |
| Year 2, Semester | | |
| IT Core Option U | | |
| IT Core Option U | | |
| LLB103 | Dispute Resolution | |
| | Contemporary Law | |
| LLB104 | and Justice | |
| Year 2, Semester | r 2 | |
| IT Major Unit | | |
| IT Major Unit | Ele etitore | |
| Introductory Law | | |
| LLH201 | Legal Research | |
| Year 3, Semester IT Major Unit | r 1 | |
| IT Major Unit | | |
| LLB202 | Contract Law | |
| LLB203 | Constitutional Law | |
| Year 3, Semester | r 2 | |
| IT Major Unit | | |
| IT Major Unit | | |
| LLB204 | Commercial and Personal Property Law | |
| LLB205 | Equity and Trusts | |
| Year 4, Semester | r 1 | |
| IT Major Unit | | |
| IT Major Unit | | |
| LLB301 | Real Property Law | |
| General Law Elec | ctive | |
| Year 4, Semester | r 2 | |
| IT Major Unit | | |
| IT Major Unit | | |
| LLB303 | Evidence | |
| LLH206 | Administrative Law | |
| Year 5, Semester | r 1 | |
| LLB304 | Commercial Remedies | |
| LLH302 | Ethics and the Legal Profession | |
| General Law Elec | | |
| | rsity-wide Minor Unit | |
| General Law Elec | | |
| Year 5, Semester | rsity-wide Minor Unit | |
| | | |

| Elective or University-wide Minor Unit | | |
|--|--|--|
| Year 6, Semester 1 | | |
| LLH401 | Legal Research Capstone | |
| Advanced Law Elective | | |
| Advanced Law Elective | | |
| Semesters Year 1, Semester 2 Year 2, Semester 1 Year 2, Semester 2 | | |
| Year 3, Semester 1 Year 3, Semester 2 Year 4, Semester 1 Year 4, Semester 2 Year 5, Semester 1 Year 5, Semester 2 | | |
| • <u>Year 6,</u> | Semester 1 | |
| | Semester 2 lective Information | |
| | | |
| Code Year 1, Sem | Title | |
| LLB101 | Introduction to Law | |
| LLB101 LLB102 | Torts | |
| Year 2, Sem | | |
| LLB103 | Dispute Resolution | |
| LLB104 | Contemporary Law and Justice | |
| Year 2, Sem | | |
| rear 2, Sem | Legal Problems and | |
| LLB105 | Communication | |
| LLB106 | Criminal Law | |
| Interpretation | B107 Statutory n replaces LLB105 Legal d Communication | |
| Year 3, Sem | ester 1 | |
| | Contract Law | |
| LLH201 | Legal Research | |
| Year 3, Sem | ester 2 | |
| | | |
| LLB204 | Commercial and Personal Property Law | |
| | | |
| | Property Law Law Elective ester 1 | |
| Introductory Year 4, Sem LLB204 | Property Law Law Elective ester 1 Commercial and Personal Property Law | |
| Introductory Year 4, Sem LLB204 General Law | Property Law Law Elective ester 1 Commercial and Personal Property Law V Elective | |
| Introductory Year 4, Sem LLB204 | Property Law Law Elective ester 1 Commercial and Personal Property Law V Elective ester 2 | |
| Introductory Year 4, Sem LLB204 General Law Year 4, Sem LLB205 | Property Law Law Elective ester 1 Commercial and Personal Property Law / Elective ester 2 Equity and Trusts | |
| Introductory Year 4, Sem LLB204 General Law Year 4, Sem LLB205 LLH206 | Property Law Law Elective ester 1 Commercial and Personal Property Law Elective ester 2 Equity and Trusts Administrative Law | |
| Introductory Year 4, Sem LLB204 General Law Year 4, Sem LLB205 LLH206 Year 5, Sem | Property Law Law Elective ester 1 Commercial and Personal Property Law / Elective ester 2 Equity and Trusts Administrative Law ester 1 | |
| Introductory Year 4, Sem LLB204 General Law Year 4, Sem LLB205 LLH206 Year 5, Sem LLB301 | Property Law Law Elective ester 1 Commercial and Personal Property Law / Elective ester 2 Equity and Trusts Administrative Law ester 1 Real Property Law | |
| Introductory Year 4, Sem LLB204 General Law Year 4, Sem LLB205 LLH206 Year 5, Sem LLB301 General Law | Property Law Law Elective ester 1 Commercial and Personal Property Law / Elective ester 2 Equity and Trusts Administrative Law ester 1 | |

| Year 5, Semester 2 | | |
|---|------------------------------------|--|
| LLB303 | Evidence | |
| LLB306 | 306 Civil Procedure | |
| LLH305 Corporate Law | | |
| General Law Elective or Non-law Elective or University-wide Minor Unit* | | |
| Year 6, Sem | lester 1 | |
| LLB304 | Commercial Remedies | |
| LLH302 | Ethics and the Legal Profession | |
| General Law Elective or Non-law Elective or University-wide Minor Unit* | | |
| General Law Elective or Non-law Elective or University-wide Minor Unit* | | |
| Year 6, Semester 2 | | |
| Advanced Law Elective | | |
| Advanced Law Elective | | |
| *Law Elective Information | | |
| Law Students may complete up to 4 non-law electives or a university wide minor comprised of 4 units in place of the equivalent number of general law | | |

Semesters

• Semester 1 (February)

electives.

| Semester 1 (reordary) commencements Year 1, Semester 1 Year 1, Semester 2 Year 2, Semester 1 Year 3, Semester 1 Year 3, Semester 2 Year 4, Semester 1 Year 4, Semester 2 | | |
|---|---|--|
| Semester 2 (July) commencements | | |
| <u>Year 1, Semester 2</u> <u>Year 2, Semester 1</u> | | |
| Year 2. Semester 2 | | |
| Year 3, Semester 1 Year 3, Semester 2 | | |
| Year 3, Seme Year 4, Seme | | |
| Year 4, Seme | ester 2 | |
| Year 5, Seme | ester 1 | |
| Code | Title | |
| Semester 1 (February) commencements | | |
| Semester 1 (Febru | uary) commencements | |
| Semester 1 (Febru Year 1, Semester | | |
| | | |
| Year 1, Semester | 1 | |
| Year 1, Semester IFB101 | 1 Impact of IT Computer Technology Fundamentals | |
| Year 1, Semester IFB101 IFB102 | 1 Impact of IT Computer Technology Fundamentals | |
| Year 1, Semester IFB101 IFB102 Year 1, Semester IFB104 IFB130 | 1Impact of ITComputerTechnologyFundamentals2Building IT SystemsDatabaseManagement | |
| Year 1, Semester IFB101 IFB102 Year 1, Semester IFB104 | 1Impact of ITComputerTechnologyFundamentals2Building IT SystemsDatabaseManagement | |
| Year 1, Semester IFB101 IFB102 Year 1, Semester IFB104 IFB130 | 1Impact of ITComputerTechnologyFundamentals2Building IT SystemsDatabaseManagement | |
| Year 1, Semester IFB101 IFB102 Year 1, Semester IFB104 IFB130 Year 2, Semester | 1Impact of ITComputerTechnologyFundamentals2Building IT SystemsDatabaseManagement1Designing for IT | |
| Year 1, Semester IFB101 IFB102 Year 1, Semester IFB104 IFB130 Year 2, Semester IFB103 | 1Impact of ITComputerTechnologyFundamentals2Building IT SystemsDatabaseManagement1Designing for ITn | |



| | Principles |
|----------------------------|---|
| CAB202 | Microprocessors and |
| | Digital Systems |
| Year 3, Semester CAB203 | 1 Discrete Structures |
| | Software |
| CAB302 | Development |
| Year 3, Semester | 2 |
| CAB303 | Networks |
| IFB299 | IT Project Design and Development |
| Year 4, Semester | |
| CAB301 | Algorithms and Complexity |
| IFB398 | Capstone Project (Phase 1) |
| Year 4, Semester | 2 |
| IFB399 | Capstone Project (Phase 2) |
| Select one of: | |
| CAB401 | High Performance and Parallel Computing |
| CAB402 | Programming Paradigms |
| CAB403 | Systems Programming |
| Semester 2 (July) | |
| Year 1, Semester | 2 |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| Year 2, Semester | 1 |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| Year 2, Semester | |
| CAB201 | Programming Principles |
| IFB130 | Database Management |
| Year 3, Semester | 1 |
| CAB202 | Microprocessors and Digital Systems |
| CAB301 | Algorithms and Complexity |
| Year 3, Semester | 2 |
| CAB303 | Networks |
| IFB299 | IT Project Design and Development |
| Year 4, Semester | |
| CAB203 | Discrete Structures |
| CAB302 | Software Development |
| Year 4, Semester | |
| IFB398 | Capstone Project (Phase 1) |

| Select ONE of: | | |
|--|---|--|
| CAB401 | High Performance and Parallel Computing | |
| CAB403 | Systems Programming | |
| OR IT Core Unit Option | | |
| Year 5, Semester | 1 | |
| IFB399 | Capstone Project (Phase 2) | |
| Select ONE of: | | |
| CAB401 | High Performance and Parallel Computing | |
| CAB402 | Programming Paradigms | |
| OR IT Core Unit Option | | |
| (Select IT Core Unit Option here, if not selected previously.) | | |

Semesters

| Semesters | |
|---|---|
| <u>Semester 1 (February)</u> | |
| commencements | |
| Year 1, Semester 1 | |
| Year 1, Semester 2 | |
| Year 2, Semester 1 | |
| Year 2, Semester 2 | |
| • <u>Year 3, Semester 1</u> • <u>Year 3, Semester 2</u> | |
| Year 3, Semester 2 Year 4, Semester 1 | |
| <u>Year 4, Semester 1</u> <u>Year 4, Semester 2</u> | |
| Year 4, Semester 2 Semester 2 (July) commencements | |
| Year 1, Semes | ter 2 |
| Year 2, Semes | ter 1 |
| Year 2, Semes | ter 2 |
| Year 3, Semes | ter 1 |
| Year 3, Semes | |
| Year 4, Semes | ter 1 |
| Year 4, Semes | ster 2 |
| Year 5, Semes | <u>ster 1</u> |
| Code | Title |
| Semester 1 (Februa | ry) commencements |
| | |
| Year 1, Semester 1 | |
| Year 1, Semester 1 IFB101 | Impact of IT |
| | - |
| | Impact of IT Computer Technology |
| IFB101 | Computer |
| IFB101 IFB102 | Computer Technology |
| IFB101 | Computer Technology |
| IFB101 IFB102 Year 1, Semester 2 IFB104 | Computer Technology Fundamentals Building IT Systems |
| IFB101 IFB102 Year 1, Semester 2 | Computer Technology Fundamentals Building IT Systems Database |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 | Computer Technology Fundamentals Building IT Systems |
| IFB101 IFB102 Year 1, Semester 2 IFB104 | Computer Technology Fundamentals Building IT Systems Database Management |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 | Computer Technology Fundamentals Building IT Systems Database |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 | Computer Technology Fundamentals Building IT Systems Database Management |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 IT Core Unit Option | Computer Technology Fundamentals Building IT Systems Database Management Designing for IT |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 IT Core Unit Option Year 2, Semester 2 | Computer Technology Fundamentals Building IT Systems Database Management Designing for IT |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 IT Core Unit Option | Computer Technology Fundamentals Building IT Systems Database Management Designing for IT Designing for IT |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 IT Core Unit Option Year 2, Semester 2 | Computer Technology Fundamentals Building IT Systems Database Management Designing for IT Designing for IT |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 IT Core Unit Option Year 2, Semester 2 IAB201 | Computer Technology Fundamentals Building IT Systems Database Management Designing for IT Designing for IT Modelling Information Systems Business of |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 IT Core Unit Option Year 2, Semester 2 | Computer Technology Fundamentals Building IT Systems Database Management Designing for IT Designing for IT |

| Year 3, Semester 1 | |
|---|---|
| Tear o, cemester T | Business Process |
| IAB203 | Modelling |
| IAB204 | Business Analysis |
| Year 3, Semester 2 | |
| IAB205 | Corporate Systems |
| IFB299 | IT Project Design and Development |
| Year 4, Semester 1 | |
| IFB398 | Capstone Project (Phase 1) |
| Select one of: | |
| IAB302 | Information Systems Consulting |
| IAB303 | Business Intelligence |
| IAB304 | Project Management |
| Year 4, Semester 2 | |
| | Enterprise |
| IAB301 | Architecture |
| IFB399 | Capstone Project (Phase 2) |
| Semester 2 (July) c | · · · · |
| Year 1, Semester 2 | |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| | i unuuniontulo |
| Year 2. Semester 1 | |
| Year 2, Semester 1 IFB103 | Designing for IT |
| | Designing for IT Building IT Systems |
| IFB103 IFB104 | |
| IFB103 | Building IT Systems Database |
| IFB103 IFB104 Year 2, Semester 2 | Building IT Systems |
| IFB103 IFB104 Year 2, Semester 2 IFB130 | Building IT Systems Database Management Modelling Information |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 | Building IT Systems Database Management Modelling Information Systems Business of Information |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 | Building IT Systems Database Management Modelling Information Systems Business of |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 | Building IT Systems Database Management Modelling Information Systems Business of Information |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option | Building IT Systems Database Management Modelling Information Systems Business of Information |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 | Building IT Systems Database Management Modelling Information Systems Business of Information Technology |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 | Building IT Systems Database Management Modelling Information Systems Business of Information Technology Business Analysis |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 | Building IT Systems Database Management Modelling Information Systems Business of Information Technology Business Analysis |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 | Building IT Systems Database Management Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process Modelling IT Project Design |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 IAB203 IFB299 | Building IT Systems Database Management Modelling Information Systems Business of Information Corporate Systems Business Process Modelling |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 IAB203 | Building IT Systems Database Management Database Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process Modelling IT Project Design and Development Enterprise |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 IAB203 IFB299 Year 4, Semester 2 | Building IT Systems Database Management Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process Modelling IT Project Design and Development Enterprise Architecture |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 IAB203 IFB299 Year 4, Semester 2 | Building IT Systems Database Management Database Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process Modelling IT Project Design and Development Enterprise |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=IX87&courseID=32831. CRICOS No.00213J

QUT

| IFB399 | Capstone Project (Phase 2) |
|----------------|-----------------------------------|
| Select ONE of: | |
| IAB302 | Information Systems Consulting |
| IAB303 | Business Intelligence |
| IAB304 | Project Management |

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

| Introductory Law Electives | |
|----------------------------|--------------------------------------|
| Code | Title |
| LLB140 | Human Rights Law |
| LLB141 | Introduction to International Law |
| LLB142 | Regulation of Business |

Please note that some law elective units maybe offered in alternate years and/or are subject to student enrolments. Please refer QUT Real Law (LAW_Real_Law) Blackboard site under My Community on your blackboard homepage for unit offerings to determine which units will be available.

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

| General Law Electives List | |
|----------------------------|--|
| Code | Title |
| LLB240 | Chinese Legal System |
| LLB241 | Discrimination and Equal Opportunity Law |
| LLB242 | Media Law |
| LLB243 | Family Law |
| LLB244 | Criminal Law Sentencing |
| LLB245 | Sports Law |
| LLB246 | Principles of Labour Law |
| LLB340 | Banking and Finance Law |
| LLB341 | Artificial Intelligence, Robots and the Law |
| LLB342 | Immigration and Refugee Law |
| LLB344 | Intellectual Property Law |
| LLB345 | Internet Law |

| LLB346 | Succession Law |
|--|--------------------------------------|
| LLB347 | Taxation Law |
| LLB348 | Socio-Legal Research Methods |
| LLB349 | Japanese Law |
| LLB350 | The Law and Ethics of War |
| LLB440 | Environmental Law |
| LLB443 | Mining and Resources Law |
| LLB444 | Real Estate Transactions |
| LLB446 | Private International Law |
| LLB447 | International Arbitration |
| LLB460 | Competition Moots A |
| LLB461 | Competition Moots B |
| LLB462 | Learning in Professional Practice |
| LLB463 | Legal Clinic (Organised Program) |
| LLB464 | International Legal Placement |
| LLB464 was previously titled Legal Clinic (International) | |

The new Bachelor of Laws (Honours) is effective from semester 1, 2015. As a result of this new course, some of the unit codes have changed to LLBxxx. Your study plan will be updated to reflect these changes. For information regarding these changes, please refer to the QUT Real Law (LAW_Real_Law) Blackboard site under My Community on your blackboard homepage or contact

<u>law enquiries@qut.edu.au</u> for further information.

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

| Advanced Law Electives | |
|------------------------|---|
| Code | Title |
| LLH470 | Commercial Contracts in Practice |
| LLH471 | Health Law and Practice |
| LLH472 | Public International Law |
| LLH473 | Independent Research Project |
| LLH474 | Insolvency Law |
| LLH475 | Theories of Law |
| LLH476 | Competition Law |
| LLH477 | Innovation and Intellectual Property |

| | Law |
|--------|----------------------|
| | Advanced Criminal |
| LLH478 | Law - Principles and |
| | Practice |



QUT

Bachelor of Business/Bachelor of Games and Interactive Environments

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | IX93 |
| CRICOS | 092651C |
| Duration (full-time) | 4 years |
| OP | 9 |
| Rank | 81 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,600 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Director of Studies, QUT Business School; email: bus@qut.edu.au; or Dr Ross Brown (Games and Interactive Environment); email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

• Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Business program and 192 credit points from the Bachelor of Games and Interactive Environments program.

Business component:

- 8 units (96 credit points) of Business School core units
- 8 units (96 credit points) of Major core units*

* Please note Accounting major students complete 6 business core units (72 credit points) and 10 accountancy major units (120 credit points) to allow them to complete professional requirements.

Games and Interactive Environments component:

- 6 units (72 credit points) of games and interactive environments core units, which includes 2 units (24 credit points) of option units** selected from an approved list.
- 10 units (120 credit points) of Major

core units.

** Unit options list - comprises a range of units from which you choose to undertake two (2). The core option choices provide you with space in your course to explore other fields such as within Games and Interactive Environments, Information Technology. The core option choices can be used to complement your Major studies.

International Course

structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Business program and 192 credit points from the Bachelor of Games and Interactive Environments program.

Business component:

- 8 units (96 credit points) of Business School core units
- 8 units (96 credit points) of Major core units*

* Please note Accounting major students complete 6 business core units (72 credit points) and 10 accountancy major units (120 credit points) to allow them to complete professional requirements.

Games and Interactive Environments component:

- 6 units (72 credit points) of games and interactive environments core units, which includes 2 units (24 credit points) of option units** selected from an approved list.
- 10 units (120 credit points) of Major core units.

** Unit options list - comprises a range of units from which you choose to undertake two (2). The core option choices provide you with space in your course to explore other fields such as within Games and Interactive Environments, Information Technology. The core option choices can be used to complement your Major studies.

Sample Structure Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
 Year 4, Semester 1
- Year 4, Semester 2



Bachelor of Business/Bachelor of Games and Interactive Environments

| Code Title |
|---|
| Year 1, Semester 1 |
| Business School Core Unit |
| Business School Core Unit |
| BGIE Core Unit |
| BGIE Core Unit |
| Year 1, Semester 2 |
| Business School Core Unit |
| Business School Core Unit |
| BGIE Core Unit |
| BGIE Core Unit |
| Year 2, Semester 1 |
| Business School Core Unit |
| Business School Core Unit |
| BGIE Major Unit (Studio) |
| BGIE Core Option Unit |
| Year 2, Semester 2 |
| Business School Core Unit |
| Business School Major Unit |
| BGIE Major Unit |
| BGIE Major Unit |
| Year 3, Semester 1 |
| Business School Major Unit |
| Business School Major Unit |
| BGIE Major Unit |
| |
| BGIE Core Unit Option |
| Year 3, Semester 2 |
| Business School Major Unit |
| Business School Major Unit |
| BGIE Major Unit (Studio) |
| BGIE Major Unit |
| Year 4, Semester 1 |
| Business School Major Unit |
| Business School Major Unit |
| BGIE Major Unit |
| BGIE Major Unit (Studio) |
| Year 4, Semester 2 |
| Business School Major Unit |
| Business School Major Unit |
| BGIE Major Unit (Capstone) |
| BGIE Major Unit (Studio) |
| Semesters |
| <u>Semester 1 (February)</u> |
| commencements |
| Year 1, Semester 1 Year 1, Semester 2 |
| Year 2, Semester 1 |
| Year 2, Semester 2 |
| Year 3, Semester 1 Year 3, Semester 2 |
| • Year 4, Semester 1 |
| Year 4, Semester 2 |
| <u>Semester 2 (July) commencements</u> <u>Year 1, Semester 2</u> |
| |

- Year 1, Semester 2
 Year 2, Semester 1
 Year 2, Semester 2

| CodeTitleSemester 1 (February) commencementsYear 1, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB100Game Studio 1: Mini- Game DevelopmentBGIE Core Unit OptionYear 3, Semester 2KNB135Animation AestheticsYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentYear 3, Semester 2IGB200Capter Capstone Project (Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (JUly) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB100Capme Production and TechnologyYear 3, Semester 1IGB180Computer Games StudiesYear 3, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 3, Semester 1IGB100Game Production and TechnologyYear 3, Semester 1IGB100Game Studio 1: Mini- Game DevelopmentKNB135Animation AestheticsYear 3, S | Year 3, Semester 1 Year 3, Semester 2 Year 4, Semester 1 Year 4, Semester 2 Year 5, Semester 1 | |
|--|--|----------------------|
| Year 1, Semester 1IGB 180Computer Games StudiesIGB 181Game Production and TechnologyYear 1, Semester 2IFB 103Designing for ITIFB 104Building IT SystemsYear 2, Semester 1IGB 100Game Studio 1: Mini- Game DevelopmentBGIE Core Unit OptionYear 2, Semester 2KNB 127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1KNB 137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB 200Game Studio 2: Applied Game DevelopmentKNB 227CGI TechnologiesYear 4, Semester 1IGB 300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB 301Capstone Project (Game Development)IGB 400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB 103Designing for ITIFB 104Building IT SystemsYear 2, Semester 1IGB 100Game Production and TechnologyYear 3, Semester 1IGB 11Game Production and TechnologyYear 3, Semester 2IFB 103Designing for ITIFB 104Building IT SystemsYear 3, Semester 1IGB 100Game Production and TechnologyYear 3, Semester 1IGB 100Game Studio 1: Mini- Game Development | Code | Title |
| IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB100Game Studio 1: Mini- Game DevelopmentBGIE Core Unit OptionYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1KNB137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB100Cal FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | | |
| IGB180StudiesIGB181Game Production and TechnologyYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB100Game Studio 1: Mini- Game DevelopmentBGIE Core Unit OptionYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1KNB137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB100Game Production and TechnologyYear 3, Semester 1IGB180Game Production and TechnologyYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | Year 1, Semester | |
| IGB181TechnologyYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB100Game Studio 1: Mini- Game DevelopmentBGIE Core Unit OptionYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1KNB137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB100Game Production and TechnologyYear 3, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | IGB180 | Studies |
| IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB100IGB100Game Studio 1: Mini- Game DevelopmentBGIE Core Unit OptionYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1KNB137KNB137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180IGB181Game Production and TechnologyYear 3, Semester 1IGB181IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 3, Semester 1IGB180IGB180Game Studio 1: Mini- Game Development | IGB181 | |
| IFB104Building IT SystemsYear 2, Semester 1IGB100Game Studio 1: Mini- Game DevelopmentBGIE Core Unit OptionYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1KNB137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 3, Semester 1IGB181Game Production and TechnologyYear 3, Semester 1IGB181Game Production and TechnologyYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | Year 1, Semester | 2 |
| Year 2, Semester 1IGB100Game Studio 1: Mini- Game DevelopmentBGIE Core Unit OptionYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1KNB137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for IT IFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 3, Semester 1IGB181Game Studio 1: Mini- Game Development | IFB103 | Designing for IT |
| IGB100Game Studio 1: Mini- Game DevelopmentBGIE Core Unit OptionYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1KNB137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 3, Semester 2KNB135Animation AestheticsYear 3, Semester 1IGB180Game Production and TechnologyYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | | - · |
| IGB100Game DevelopmentBGIE Core Unit OptionYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1KNB137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB200Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 3, Semester 2KNB135Animation AestheticsYear 3, Semester 1IGB180Game Production and TechnologyYear 3, Semester 2KNB135Animation AestheticsYear 3, Semester 1IGB180Game Production and TechnologyYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | Year 2, Semester | |
| Year 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1KNB137KNB137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for IT IFB104IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 1IGB181Game Production and TechnologyYear 3, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | IGB100 | |
| KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1KNB137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for IT IFB104IGB180Computer Games StudiesYear 2, Semester 1IGB180Game Production and TechnologyYear 3, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB180Game Production and TechnologyYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | | • |
| KNB135Animation AestheticsYear 3, Semester 1KNB137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for IT IFB104IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 1IGB181Game Production and TechnologyYear 3, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | | |
| Year 3, Semester 1KNB137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for IT IFB104IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | KNB127 | |
| KNB137Digital WorldsBGIE Core Unit OptionYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for IT IFB104IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | | |
| Beglin FrontierBGIE Core Unit OptionYear 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for IT IFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | | |
| Year 3, Semester 2IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July)commencementsYear 1, Semester 2IFB103Designing for IT IFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | | • |
| IGB200Game Studio 2: Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | | • |
| IGB200Applied Game DevelopmentKNB227CGI TechnologiesYear 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | Year 3, Semester | |
| Year 4, Semester 1IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | IGB200 | Applied Game |
| IGB300Capstone Project (Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | KNB227 | CGI Technologies |
| IGB300(Game Design)KNB217Digital CreaturesYear 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | Year 4, Semester | 1 |
| Year 4, Semester 2IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | IGB300 | |
| IGB301Capstone Project (Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | KNB217 | Digital Creatures |
| IGB301(Game Development)IGB400Game Studio 3: Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | Year 4, Semester | |
| IGB400Game InnovationSemester 2 (July) commencementsYear 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | IGB301 | |
| Year 1, Semester 2IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127KNB127CGI Foundations Animation AestheticsYear 3, Semester 1IGB100IGB100Game Studio 1: Mini- Game Development | IGB400 | |
| IFB103Designing for ITIFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127CGI Foundations Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | Semester 2 (July) | commencements |
| IFB104Building IT SystemsYear 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127CGI Foundations Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | Year 1, Semester | 2 |
| Year 2, Semester 1IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127CGI Foundations KNB135KNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | IFB103 | Designing for IT |
| IGB180Computer Games StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | IFB104 | Building IT Systems |
| IGB 180StudiesIGB181Game Production and TechnologyYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | Year 2, Semester | 1 |
| IGB181TechnologyYear 2, Semester 2KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | IGB180 | |
| KNB127CGI FoundationsKNB135Animation AestheticsYear 3, Semester 1IGB100IGB100Game Studio 1: Mini- Game Development | IGB181 | |
| KNB135Animation AestheticsYear 3, Semester 1IGB100Game Studio 1: Mini- Game Development | Year 2, Semester | 2 |
| Year 3, Semester 1 IGB100 Game Studio 1: Mini- Game Development | KNB127 | CGI Foundations |
| IGB100 Game Studio 1: Mini- Game Development | KNB135 | Animation Aesthetics |
| Game Development | Year 3, Semester | 1 |
| KNB137 Digital Worlds | IGB100 | |
| | KNB137 | Digital Worlds |

| IGB200 | Game Studio 2: Applied Game Development | |
|--------------------------------------|---|--|
| KNB227 | CGI Technologies | |
| Year 4, Semester | 1 | |
| IGB300 | Capstone Project (Game Design) | |
| KNB217 | Digital Creatures | |
| Year 4, Semester 2 | | |
| Year 4, Semester | 2 | |
| Year 4, Semester | 2 Capstone Project (Game Development) | |
| | Capstone Project | |
| IGB301 | Capstone Project (Game Development) Game Studio 3: Game Innovation | |
| IGB301 IGB400 | Capstone Project (Game Development) Game Studio 3: Game Innovation 1 | |
| IGB301 IGB400 Year 5, Semester | Capstone Project (Game Development) Game Studio 3: Game Innovation 1 ption | |

Semesters

| Semesters | | |
|--|-----------------------|--|
| Semester 1 | (February) | |
| <u>commencem</u> | | |
| Year 1, Sem | | |
| Year 1, Sem | | |
| Year 2, Sem | ester 1 | |
| Year 2, Sem Year 3, Sem | <u>ester 2</u> | |
| <u>Year 3, Sem</u> | ester 2 | |
| Year 4, Sem | ester 1 | |
| Year 4, Sem | ester 2 | |
| | (July) commencements | |
| Year 1, Sem | | |
| Year 2, Sem | | |
| Year 2, Sem | | |
| Year 3, Sem | ester 1 | |
| Year 3, Sem Year 4, Sem | ester 2 | |
| • <u>Year 4, Sem</u> | | |
| Year 5, Sem | | |
| | | |
| Code | Title | |
| Semester 1 (Febr | uary) commencements | |
| Year 1, Semester | 1 | |
| IGB180 | Computer Games | |
| | Studies | |
| IGB181 | Game Production and | |
| 100101 | Technology | |
| Year 1, Semester | | |
| IFB103 | Designing for IT | |
| IFB104 | Building IT Systems | |
| Year 2, Semester | 1 | |
| IGB100 | Game Studio 1: Mini- | |
| IGB100 | Game Development | |
| BGIE Core Unit Option | | |
| Year 2, Semester 2 | | |
| 100000 | Fundamentals of | |
| IGB220 | Game Design | |
| | Interactive Narrative | |
| DXB304 | Design | |
| Year 3, Semester 1 | | |
| | Programming for | |
| DXB303 | Visual Designers | |
| BGIE Core Unit Option | | |
| DOIL COIL OUIL O | plion | |

Year 3, Semester 2

QUT

Bachelor of Business/Bachelor of Games and Interactive Environments

| Year 3, Semester | 2 |
|-----------------------|--|
| | Game Studio 2: |
| IGB200 | Applied Game Development |
| | • |
| IGB321 | Immersive Game Level Design |
| Year 4, Semester | <u> </u> |
| | Capstone Project |
| IGB300 | (Game Design) |
| 100000 | Game Design in |
| IGB320 | Different Contexts |
| Year 4, Semester | 2 |
| IGB301 | Capstone Project |
| | (Game Development) |
| IGB400 | Game Studio 3: |
| Competer 2 (lut) | Game Innovation |
| | commencements |
| Year 1, Semester | |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| Year 2, Semester | |
| IGB180 | Computer Games Studies |
| | Game Production and |
| IGB181 | Technology |
| Year 2, Semester | ÷. |
| | - Fundamentals of |
| IGB220 | Game Design |
| DXB304 | Interactive Narrative |
| DAD304 | Design |
| Year 3, Semester | 1 |
| IGB100 | Game Studio 1: Mini- |
| | Game Development |
| DXB303 | Programming for |
| Voor 2 Comedan | Visual Designers |
| Year 3, Semester | |
| IGB200 | Game Studio 2: Applied Game |
| | Development |
| 100004 | Immersive Game |
| IGB321 | Level Design |
| Year 4, Semester | 1 |
| IGB300 | Capstone Project |
| | (Game Design) |
| IGB320 | Game Design in |
| | Different Contexts |
| Year 4, Semester | |
| IGB301 | Capstone Project (Game Development) |
| IGB400 | Game Studio 3: |
| | Game Innovation |
| Year 5, Semester | |
| BGIE Core Unit O | • |
| BGIE Core Unit Option | |
| Somastars | |

• Year 1, Semester 2 Year 2, Semester 1 Year 2, Semester 2 Year 3, Semester 1 Year 3, Semester 2 Year 4, Semester 1 Year 4, Semester 2 Semester 2 (July) commencements Year 1, Semester 2 Year 2, Semester 1 Year 2, Semester 2 ٠ Year 3, Semester 1 Year 3, Semester 2 Year 4, Semester 1 Year 4, Semester 2 • Year 5, Semester 1 Code Title Semester 1 (February) commencements Year 1, Semester 1 **Computer Games IGB180** Studies Game Production and **IGB181** Technology Year 1, Semester 2 **IFB103** Designing for IT IFB104 **Building IT Systems** Year 2, Semester 1 Game Studio 1: Mini-**IGB100** Game Development **BGIE Core Unit Option** Year 2, Semester 2

• Year 1, Semester 1

| CAB201 | Programming Principles |
|-------------------|---|
| IGB283 | Game Engine Theory and Application |
| Year 3, Semester | 1 |
| CAB301 | Algorithms and Complexity |
| BGIE Core Unit O | ption |
| Year 3, Semester | 2 |
| IGB200 | Game Studio 2: Applied Game Development |
| IGB381 | Game Engine Technology |
| Year 4, Semester | 1 |
| IGB300 | Capstone Project (Game Design) |
| IGB383 | AI for Games |
| Year 4, Semester | 2 |
| IGB301 | Capstone Project (Game Development) |
| IGB400 | Game Studio 3: Game Innovation |
| Semester 2 (July) | commencements |
| Year 1, Semester | |
| IFB103 | Designing for IT |

Building IT Systems

| Year 2, Semester | 1 |
|--|--|
| IGB180 | Computer Games Studies |
| IGB181 | Game Production and Technology |
| Year 2, Semester | 2 |
| CAB201 | Programming Principles |
| IGB283 | Game Engine Theory and Application |
| Year 3, Semester | 1 |
| CAB301 | Algorithms and Complexity |
| IGB100 | Game Studio 1: Mini- Game Development |
| Year 3, Semester | 2 |
| IGB200 | Game Studio 2: Applied Game |
| | Development |
| IGB381 | Game Engine Technology |
| IGB381 Year 4, Semester | Game Engine Technology |
| | Game Engine Technology |
| Year 4, Semester | Game Engine Technology 1 Capstone Project |
| Year 4, Semester IGB300 | Game Engine Technology 1 Capstone Project (Game Design) Al for Games |
| Year 4, Semester IGB300 IGB383 | Game Engine Technology 1 Capstone Project (Game Design) Al for Games |
| Year 4, Semester IGB300 IGB383 Year 4, Semester | Game Engine Technology 1 Capstone Project (Game Design) Al for Games 2 Capstone Project |
| Year 4, Semester IGB300 IGB383 Year 4, Semester IGB301 | Game Engine Technology 1 Capstone Project (Game Design) Al for Games 2 Capstone Project (Game Development) Game Studio 3: Game Innovation |
| Year 4, Semester IGB300 IGB383 Year 4, Semester IGB301 IGB400 | Game Engine Technology 1 Capstone Project (Game Design) AI for Games 2 Capstone Project (Game Development) Game Studio 3: Game Innovation 1 |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.gut.edu.au/enrolment/courses/course?course?code=IX93&courseID=32834. CRICOS No.00213J

IFB104

Semesters

• Semester 1 (February)

commencements



Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | SE20 |
| CRICOS | 078353G |
| Duration (full-time) | 4 years |
| OP | 7 |
| Rank | 86 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$32,200 per year full-time (96 credit points) |
| Total credit points | 384 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Graham Johnson (Science Major); Associate Professor Tim Moroney (Mathematics Major); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Marion Bateson (Biological Science); Dr James Blinco (Chemistry); Dr Luke Nothdurft (Earth Science); Dr Andrew Baker (Environmental Science); Professor Nunzio Motto (Physics); TBA (Applied and Computational Mathematics); Associate Professor Paul Corry (Decision Science); and Associate Professor Chris Drovandi (Statistical Science). |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: At least one of Chemistry, Physics, Biology, Geography, Earth Science or Maths C.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: At least one of Chemistry, Physics, Biology, Geography, Earth Science or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

Studying a double degree in applied science and mathematics will provide you with advanced knowledge and skills that are highly sought after by employers. The course is made up of 384 credit points, with each component degree (i.e. Science and Mathematics) comprising 192 credit points each.

From the very first semester, in both your science and your mathematics studies, you will have the opportunity to collaborate with your peers and teaching staff in QUT's exciting new learning environments. You will explore real world problems from multiple scientific, mathematical and statistical perspectives and learn the tools of the trade. Depending on your choices you may find yourself out in the field, working in the laboratory or learning about the impact of scientific discovery on people, policy, industry and the planet. Working with data that you have collected, you will apply fundamental methods of scientific practice, perform scientific analysis, and present your findings. You will learn about a range of career and professional outcomes so that you can get the most from the flexibility the Bachelor of Science has to offer. Your mathematics studies will strengthen your quantitative analysis skills.

Your choice of science major will provide you with in-depth knowledge and expertise in a scientific discipline. Your choice of mathematics units/major will allow you to develop more advanced quantitative skills and problem solving capabilities that can be applied to larger and more complex real world problems. Both of which will prepare you for entry into the workforce or further study. You can even work with industry or get credit to study overseas.

Aim

This double degree aims to provide graduates with opportunities to develop their skills and knowledge in mathematics and science. You will develop the ability to apply mathematics, statistics, computational methods and decision science to real world problems. The Bachelor of Science aims to deliver:

Sample Structure Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
 Vear 3 Semester 1
- Year 3 Semester 1
- Year 3 Semester 2
 Year 4 Semester 1
- Year 4 Semester 1
 Year 4 Semester 2

| Title | |
|---------------------------------|--|
| Year 1 Semester 1 | |
| Grand Challenges in Science | |
| Quantitative Methods in Science | |
| Year 1 Semester 2 | |
| Science Core Unit Option | |
| Science Major Unit Option | |
| 1 | |
| Experimental Science | |
| Experimental Science | |
| | |

Bachelor of Science/Bachelor of Mathematics

| | 2 |
|-------------------|--|
| Year 2 Semester | 2 |
| BVB101 | Foundations of Biology |
| BVB102 | Evolution |
| Year 3 Semester | 1 |
| BVB202 | Experimental Design and Quantitative Methods |
| BVB301 | Animal Biology |
| Year 3 Semester | 2 |
| BVB201 | Biological Processes |
| BVB204 | Ecology |
| Year 4 Semester | 1 |
| BVB203 | Plant Biology |
| BVB305 | Microbiology and the Environment |
| Year 4 Semester 2 | |
| BVB304 | Integrative Biology |
| BVB313 | Population Genetics and Molecular Ecology |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 Year 2 Semester 2 ٠ .
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2

| Code | Title |
|--------------------------|--------------------------------------|
| Year 1 Semester | 1 |
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 1 Semester 2 | 2 |
| CVB101 | General Chemistry |
| CVB102 | Chemical Structure and Reactivity |
| Year 2 Semester | 1 |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| Year 2 Semester 2 | 2 |
| CVB210 | Chemical Measurement Science |
| Science Core Unit Option | |
| Year 3 Semester 1 | |
| CVB201 | Inorganic Chemistry |
| CVB202 | Analytical Chemistry |

| Year 3 Semester 2 | |
|-------------------|---|
| CVB203 | Physical Chemistry |
| CVB204 | Organic Structure and Mechanisms |
| Year 4 Semester | 1 |
| CVB301 | Organic Chemistry: Strategies for Synthesis |
| CVB302 | Applied Physical Chemistry |
| Year 4 Semester 2 | |
| CVB303 | Coordination Chemistry |
| CVB304 | Chemistry Research Project |

Semesters

| Year 1 Semester 1 |
|---------------------------------------|
| Year 1 Semester 2 |
| Year 2 Semester 1 |
| Year 2 Semester 2 |
| Year 3 Semester 1 |
| Year 3 Semester 2 |
| Year 4 Semester 1 |

Year 4 Semester 2

| Code | Title |
|-----------------|---|
| Year 1 Semeste | er 1 |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| Year 1 Semeste | er 2 |
| Science Core U | nit Option |
| Science Major L | Jnit Option |
| Year 2 Semeste | er 1 |
| SEB115 | Experimental Science 1 |
| SEB116 | Experimental Science 2 |
| Year 2 Semeste | er 2 |
| ERB101 | Earth Systems |
| ERB102 | Evolving Earth |
| Year 3 Semeste | er 1 |
| ERB201 | Destructive Earth: Natural Hazards |
| ERB202 | Marine Geoscience |
| Year 3 Semeste | er 2 |
| ERB203 | Sedimentary Geology and Stratigraphy |
| ERB204 | Deforming Earth: Fundamentals of Structural Geology |
| Year 4 Semeste | er 1 |
| ERB301 | Chemical Earth |
| ERB302 | Applied Geophysics |
| Year 4 Semeste | er 2 |
| ERB303 | Energy Resources and Basin Analysis |
| ERB304 | Dynamic Earth: Plate Tectonics |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
 Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2

| • <u>Year 4 Semester 2</u> | | |
|----------------------------|--|--|
| Code | Title | |
| Year 1 Semester | 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 1 Semester | 2 | |
| Science Core Un | it Option | |
| Science Major Ur | nit Option | |
| Year 2 Semester | 1 | |
| SEB115 | Experimental Science | |
| SEB116 | Experimental Science 2 | |
| Year 2 Semester | 2 | |
| ERB101 | Earth Systems | |
| EVB102 | Ecosystems and the Environment | |
| Year 3 Semester | 1 | |
| BVB202 | Experimental Design and Quantitative Methods | |
| EVB203 | Geospatial Information Science | |
| Year 3 Semester | 2 | |
| BVB204 | Ecology | |
| EVB302 | Environmental Pollution | |
| Year 4 Semester | 1 | |
| BVB311 | Conservation Biology | |
| EVB312 | Soils and the Environment | |
| Year 4 Semester 2 | | |
| ERB310 | Groundwater Systems | |
| EVB304 | Case Studies in Environmental Science | |

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2



Bachelor of Science/Bachelor of Mathematics

| Code | Title |
|---|---|
| Year 1 Semester | 1 |
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 1 Semester | 2 |
| PVB101 | Physics of the Very Large |
| PVB102 | Physics of the Very Small |
| Year 2 Semester | 1 |
| PVB210 | Stellar Astrophysics |
| SEB104 | Grand Challenges in Science |
| Year 2 Semester | 2 |
| SEB113 | Quantitative Methods in Science |
| Science Core Uni | t Option |
| Year 3 Semester | 1 |
| PQB360 | Global Energy Balance and Climate Change |
| PVB203 | Experimental Physics |
| Year 3 Semester | |
| rour o oemester | 2 |
| PVB204 | 2 Electromagnetism |
| | |
| PVB204 | Electromagnetism Cosmology |
| PVB204 PVB220 | Electromagnetism Cosmology |
| PVB204 PVB220 Year 4 Semester | Electromagnetism Cosmology 1 Materials and |
| PVB204 PVB220 Year 4 Semester PVB301 | Electromagnetism Cosmology Materials and Thermal Physics Classical and Quantum Physics |
| PVB204 PVB220 Year 4 Semester PVB301 PVB302 | Electromagnetism Cosmology Materials and Thermal Physics Classical and Quantum Physics |

Semesters

- Applied and Computational
- Mathematics Major unit set:
- ٠ Year 1 Semester 1
- Year 1 Semester 2 Year 2 Semester 1
- Year 2 Semester 2
- ٠
- Year 3 Semester 1 Year 3 Semester 2 •
- Year 4 Semester 1
- Year 4 Semester 2
- NOTE:

| Code | Title |
|--|------------------------------------|
| Applied and Computational Mathematics Major unit set: | |
| Year 1 Sem | ester 1 |
| MXB102 | Abstract Mathematical Reasoning |
| Maths Core Options Unit** | |
| OR | |
| MXB101 | Probability and Stochastic |

| | Modelling 1 | |
|--|--|--|
| OR | | |
| MXB103 | Introductory Computational Mathematics | |
| Year 1 Sem | ester 2 | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| (PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors) | | |
| Year 2 Sem | | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| OR Maths Core Options Unit** (select if completed MXB101 in first year) | | |
| MXB103 | Introductory Computational Mathematics | |
| OR Maths Core Options Unit** (select if completed MXB103 in first year) | | |
| Year 2 Sem | ester 2 | |
| MXB107 | Introduction to Statistical Modelling | |
| Maths Core | Options Unit** | |
| Year 3 Sem | ester 1 | |
| MXB201 | Advanced Linear Algebra | |
| MXB221 | Ordinary Differential Equations | |
| Year 3 Sem | ester 2 | |
| MXB202 | Advanced Calculus | |
| MXB222 | Computational Linear Algebra | |
| Year 4 Sem | ester 1 | |
| MXB321 | Applied Transport Theory | |
| MXB322 | Partial Differential Equations | |
| Year 4 Semester 2 | | |
| MXB323 | Dynamical Systems | |
| MXB324 | Computational Fluid Dynamics | |
| NOTE: | | |
| ** Only TWO (2) Option units may be taken in these 4 unit-slots. | | |
| Semestere | | |

- Decision Science Major unit set:
- Year 1 Semester 1
- Year 1 Semester 2
 Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
 Year 4 Semester 1
- Year 4 Semester 2
- <u>NOTE:</u>

| Decision Science Major unit set:Year 1 Semester 1MXB102Abstract Mathematical ReasoningMaths Core Options Unit**ORMXB101Probability and Stochastic Modelling 1ORMXB103Introductory Computational MathematicsYear 1 Semester 2MXB105Calculus of One and Two VariablesMXB106Linear Algebra and Differential Equations(PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors)Year 2 Semester 1MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMaths Core Options Unit** (select if completed MXB103 in first year)Year 3 Semester 1MXB201Advanced Linear Algebra Modelling 2MXB211Advanced Linear AlgebraMXB222Advanced CalculusMXB232Introduction to Operations ResearchYear 3 Semester 2MXB331Statistical InferenceORYear 4 Semester 1MXB332Operations Research for Stochastic ProcessesMXB333Advanced Optimisation ModellingMXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisa | Code | litle | | | |
|---|---|----------------------------|--|--|--|
| MXB102Abstract Mathematical ReasoningMaths Core Options Unit**ORMXB101Probability and Stochastic Modelling 1ORMXB103Introductory Computational MathematicsYear 1 Semeter 2MXB105Calculus of One and Two VariablesMXB106Linear Algebra and Differential Equations(PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors)Year 2 Semeter 1MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semeter 2MXB107Introduction to Statistical ModellingMXB107Introduction to Statistical ModellingMXB201Advanced Linear Algebra MXB211MXB201Advanced Linear AlgebraMXB221Probability and Stochastic Modelling 2ORCAB201Vear 3 Semeter 1MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semeter 2MXB331Coding Theory and Graph TheoryYear 4 Semeter 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | Decision Sc | ience Major unit set: | | | |
| MXB102ReasoningMaths Core Options Unit**ORMXB101Probability and Stochastic Modelling 1ORMXB103Introductory Computational MathematicsYear 1 Semester 2MXB105Calculus of One and Two VariablesMXB106Linear Algebra and Differential Equations(PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors)Year 2 Semester 1MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMXB107Introduction to Statistical ModellingMXB201Advanced Linear AlgebraMXB211Probability and Stochastic Modelling 2ORORCAB201Programming PrinciplesYear 3 Semester 2MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB331Statistical InferenceORYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | - | | | | |
| Maths Core Options Unit**ORMXB101Probability and Stochastic Modelling 1ORMXB103Introductory Computational MathematicsYear 1 Semester 2MXB105Calculus of One and Two VariablesMXB106Linear Algebra and Differential Equations(PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors)Year 2 Semester 1MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMXB201Advanced Linear Algebra ModellingMXB221Probability and Stochastic Modelling 2MXB221Probability and Stochastic Modelling 2MXB222Advanced Calculus MXB232MXB232Introduction to Operations ResearchYear 4 Semester 2MXB341Statistical InferenceORYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | Abstract Mathematical | | | |
| ORMXB101Probability and Stochastic Modelling 1ORMXB103Introductory Computational MathematicsYear 1 Semester 2MXB105Calculus of One and Two VariablesMXB106Linear Algebra and Differential Equations(PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors)Year 2 Semester 1MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMXB201Advanced Linear Algebra ModellingMXB201Advanced Linear AlgebraMXB201Advanced Linear AlgebraMXB201Advanced CalculusMXB202Advanced CalculusMXB202Advanced CalculusMXB202Introduction to Operations ResearchYear 4 Semester 2MXB324MXB331Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | Maths Core | 3 | | | |
| MXB101Modelling 1ORMXB103Introductory Computational MathematicsYear 1 Semester 2MXB105Calculus of One and Two VariablesMXB106Linear Algebra and Differential Equations(PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors)Year 2 Semester 1MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMXB201Advanced Linear Algebra ModellingMXB201Advanced Linear AlgebraMXB201Probability and Stochastic Modelling 2MXB201Probability and Stochastic Modelling 2MXB201Advanced Linear AlgebraMXB201Programming PrinciplesYear 3 Semester 1MXB202Advanced CalculusMXB203Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | | | | |
| MXB103Introductory Computational MathematicsYear 1 Semester 2MXB105Calculus of One and Two VariablesMXB106Linear Algebra and Differential Equations(PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors)Year 2 Semester 1MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB103Introduction to Statistical ModellingMXB107Introduction to Statistical ModellingMXB201Advanced Linear AlgebraMXB201Advanced Linear AlgebraMXB201Advanced Linear AlgebraMXB201Advanced Linear AlgebraMXB201Probability and Stochastic Modelling 2ORCalculusYear 3 Semester 1MXB202Advanced Linear AlgebraMXB232Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation Modelling MXB331MXB331Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | MXB101 | | | | |
| MXB103MathematicsYear 1 Semester 2MXB105Calculus of One and Two VariablesMXB106Linear Algebra and Differential Equations(PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors)Year 2 Semester 1MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMXB107Introduction to Statistical ModellingMaths Core Options Unit Year 3 Semester 1MXB201Advanced Linear Algebra Modelling 2MXB201Advanced Linear Algebra Modelling 2MXB202Advanced Calculus MXB203MXB203Introduction to Operations ResearchYear 4 Semester 1MXB202MXB32Optimisation Modelling MXB341MXB331Coding Theory and Graph TheoryYear 4 Semester 2MXB334MXB334Operations Research for Stochastic Processes MXB335MXB335Advanced Optimisation Modelling | OR | | | | |
| MXB105Calculus of One and Two VariablesMXB106Linear Algebra and Differential Equations(PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors)Year 2 Semester 1MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMXB107Introduction to Statistical ModellingMXB201Advanced Linear Algebra MXB241MXB201Advanced Linear AlgebraMXB241Probability and Stochastic Modelling 2ORIntroduction to Operations ResearchYear 3 Semester 2MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB331Coding Theory and Graph TheoryMXB331Coding Theory and Graph TheoryMXB331Coding Theory and Graph TheoryMXB335Advanced Optimisation Modelling | MXB103 | | | | |
| MXB105VariablesMXB106Linear Algebra and Differential Equations(PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors)Year 2 Semester 1MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMXB201Advanced Linear Algebra MXB221MXB201Advanced Linear AlgebraMXB241Probability and Stochastic Modelling 2ORIntroduction to Operations ResearchYear 3 Semester 2MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORYear 4 Semester 2MXB351Coding Theory and Graph TheoryMXB335Advanced Optimisation Modelling | Year 1 Sem | ester 2 | | | |
| MXB106Differential Equations(PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors)Year 2 Semester 1MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMXB201Advanced Linear Algebra Modelling 2MXB201Advanced Linear AlgebraMXB201Advanced CalculusMXB201Probability and Stochastic Modelling 2ORIntroduction to Operations ResearchYear 3 Semester 2MXB202Advanced CalculusMXB232Introduction to Operations ResearchMXB332Optimisation ModellingMXB341Statistical InferenceORVaar 4 Semester 2MXB341Coding Theory and Graph TheoryMXB331Coding Theory and Graph TheoryMXB3335Advanced Optimisation Modelling | MXB105 | | | | |
| nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors)Year 2 Semester 1MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMXB107Introduction to Statistical ModellingMaths Core Options UnitYear 3 Semester 1MXB201Advanced Linear Algebra Modelling 2MXB201Advanced Linear Algebra Modelling 2MXB202Advanced CalculusMXB203Introduction to Operations ResearchYear 3 Semester 2MXB202Advanced CalculusMXB203Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation Modelling MXB341MXB331Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | MXB106 | | | | |
| Year 2 Semester 1MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMXB201Advanced Linear AlgebraMXB221Advanced Linear AlgebraMXB241Probability and Stochastic Modelling 2ORCAB201Programming PrinciplesYear 3 Semester 2MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB331Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | nominate your Maths major in your Study Plan to select MXB105 and | | | | |
| MXB101Probability and Stochastic Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMaths Core Options UnitYear 3 Semester 1MXB201Advanced Linear AlgebraMXB241Probability and Stochastic Modelling 2ORProbability and Stochastic Modelling 2ORIntroduction to Operations ResearchYear 4 Semester 1MXB202MXB332Optimisation ModellingMXB331Statistical InferenceORCoding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | | | | |
| MXB101Modelling 1OR Maths Core Options Unit** (select if completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMaths Core Options UnitYear 3 Semester 1MXB201Advanced Linear AlgebraMXB241Probability and Stochastic Modelling 2ORCAB201Programming PrinciplesYear 3 Semester 2MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB331Statistical InferenceORVear 4 Semester 2MXB331Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | Year 2 Sem | ester 1 | | | |
| completed MXB101 in first year)MXB103Introductory Computational MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMaths Core Options UnitYear 3 Semester 1MXB201Advanced Linear AlgebraMXB241Probability and Stochastic Modelling 2ORCAB201Programming PrinciplesYear 3 Semester 2MXB202Advanced CalculusMXB203Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB331Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | Modelling 1 | | | |
| MXB103MathematicsOR Maths Core Options Unit** (select if completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMaths Core Options UnitYear 3 Semester 1MXB201Advanced Linear AlgebraMXB241Probability and Stochastic Modelling 2ORCAB201Programming PrinciplesYear 3 Semester 2MXB202Advanced CalculusMXB203Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORVear 4 Semester 2MXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | | | | |
| completed MXB103 in first year)Year 2 Semester 2MXB107Introduction to Statistical ModellingMaths CoreOptions UnitYear 3 Semester 1MXB201Advanced Linear AlgebraMXB201Advanced Linear AlgebraMXB201Probability and Stochastic Modelling 2ORProbability and Stochastic Modelling 2ORImage: CAB201Year 3 Semester 2MXB202Advanced CalculusMXB203Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation Modelling MXB341MXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | MXB103 | • | | | |
| Year 2 Semester 2MXB107Introduction to Statistical ModellingMaths Core Options UnitYear 3 Semester 1MXB201Advanced Linear AlgebraMXB201Advanced Linear AlgebraMXB241Probability and Stochastic Modelling 2ORProgramming PrinciplesYear 3 Semester 2MXB202Advanced CalculusMXB203Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORORVear 4 Semester 2MXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | | | | |
| MXB107Introduction to Statistical ModellingMaths Core Options UnitYear 3 Semester 1MXB201Advanced Linear AlgebraMXB241Probability and Stochastic Modelling 2ORCAB201Programming PrinciplesYear 3 Semester 2MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORVear 4 Semester 2MXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | completed N | /IXB103 in first year) | | | |
| MXB107ModellingMaths Core Options UnitYear 3 Semester 1MXB201Advanced Linear AlgebraMXB241Probability and Stochastic Modelling 2ORProgramming PrinciplesYear 3 Semester 2MXB202MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB332MXB332Optimisation ModellingMXB341Statistical InferenceORIntroduction to Operations ResearchYear 4 Semester 1MXB331MXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | Year 2 Sem | ester 2 | | | |
| Year 3 Semester 1MXB201Advanced Linear AlgebraMXB201Probability and Stochastic Modelling 2MXB241Probability and Stochastic Modelling 2ORProgramming PrinciplesCAB201Programming PrinciplesYear 3 Semester 2MXB202Advanced CalculusMXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORORVear 4 Semester 2MXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | MXB107 | | | | |
| MXB201Advanced Linear AlgebraMXB241Probability and Stochastic Modelling 2ORCAB201Programming PrinciplesYear 3 Semester 2MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORORVear 4 Semester 2MXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | Maths Core | Options Unit | | | |
| MXB201Advanced Linear AlgebraMXB241Probability and Stochastic Modelling 2ORCAB201Programming PrinciplesYear 3 Semester 2MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORORVear 4 Semester 2MXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | Year 3 Sem | ester 1 | | | |
| MXB241Probability and Stochastic Modelling 2ORCAB201Programming PrinciplesYear 3 Semester 2MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORORWXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | | | | |
| ORCAB201Programming PrinciplesYear 3 Semester 2MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORMXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | Probability and Stochastic | | | |
| CAB201Programming PrinciplesYear 3 Semester 2MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORMXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | | | | |
| Year 3 Semester 2MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORMXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | • • • | | | | |
| MXB202Advanced CalculusMXB232Introduction to Operations ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORMXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | | | | |
| MXB232ResearchYear 4 Semester 1MXB332Optimisation ModellingMXB341Statistical InferenceORMXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | | | | |
| MXB332Optimisation ModellingMXB341Statistical InferenceORMXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | MXB232 | - | | | |
| MXB332Optimisation ModellingMXB341Statistical InferenceORMXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | Year 4 Sem | ester 1 | | | |
| MXB341Statistical InferenceORMXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | | | | |
| ORMXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | | | | |
| MXB351Coding Theory and Graph TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | - | Statistical Interence | | | |
| MXB331TheoryYear 4 Semester 2MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | OR | | | | |
| MXB334Operations Research for Stochastic ProcessesMXB335Advanced Optimisation Modelling | | Theory | | | |
| MXB334 Stochastic Processes MXB335 Advanced Optimisation Modelling | Year 4 Sem | ester 2 | | | |
| MXB335 Modelling | MXB334 | | | | |
| NOTE: | MXB335 | • | | | |
| | NOTE: | | | | |



Bachelor of Science/Bachelor of Mathematics

** Only TWO (2) Option units may be taken in these 4 unit-slots.

Semesters

- Statistical Science Major unit set:
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
 Year 3 Semester 2
 Year 3 Semester 1
- ٠ Year 3 Semester 2
- Year 4 Semester 1 ٠ Year 4 Semester 2
- <u>NOTE:</u>

| Code | Title | |
|--|---|--|
| Statistical S | cience Major unit set: | |
| Year 1 Sem | ester 1 | |
| MXB102 | Abstract Mathematical Reasoning | |
| Maths Core | Options Unit** | |
| OR | | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| OR | | |
| MXB103 | Introductory Computational Mathematics | |
| Year 1 Sem | ester 2 | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| (PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors) | | |
| Year 2 Sem | ester 1 | |
| | | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| OR Maths C | | |
| OR Maths C | Modelling 1 Core Options Unit** (select if | |
| OR Maths C completed M MXB103 OR Maths C | Modelling 1 Core Options Unit** (select if /XB101 in first year) Introductory Computational | |
| OR Maths C completed M MXB103 OR Maths C | Modelling 1 Core Options Unit** (select if IXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if IXB103 in first year) | |
| OR Maths C completed M MXB103 OR Maths C completed M | Modelling 1 Core Options Unit** (select if IXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if IXB103 in first year) | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core Year 3 Sem MXB201 MXB201 | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** ester 1 Advanced Linear Algebra Regression and Design | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core Year 3 Sem MXB201 | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** ester 1 Advanced Linear Algebra Regression and Design ester 2 | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core Year 3 Sem MXB201 MXB201 | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** ester 1 Advanced Linear Algebra Regression and Design | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core Year 3 Sem MXB201 MXB242 Year 3 Sem | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** ester 1 Advanced Linear Algebra Regression and Design ester 2 | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core Year 3 Sem MXB201 MXB242 Year 3 Sem MXB202 | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** ester 1 Advanced Linear Algebra Regression and Design ester 2 Advanced Calculus Probability and Stochastic Modelling 2 | |
| OR Maths C completed M MXB103 OR Maths C completed M Year 2 Sem MXB107 Maths Core Year 3 Sem MXB201 MXB201 MXB242 Year 3 Sem MXB202 MXB241 | Modelling 1 Core Options Unit** (select if AXB101 in first year) Introductory Computational Mathematics Core Options Unit** (select if AXB103 in first year) ester 2 Introduction to Statistical Modelling Options Unit** ester 1 Advanced Linear Algebra Regression and Design ester 2 Advanced Calculus Probability and Stochastic Modelling 2 | |

| Year 4 Semester 2 | |
|-------------------|---------------------------|
| MXB343 | Modelling Dependent Data |
| MXB344 | Generalised Linear Models |
| NOTE: | |

** Only TWO (2) Option units may be taken in these 4 unit-slots.



Handbook

| Year | 2018 | |
|-----------------------------------|--|--|
| QUT code | SE30 | |
| CRICOS | 059226F | |
| Duration (full-time) | 4 years | |
| OP | 7 | |
| Rank | 86 | |
| OP Guarantee | Yes | |
| Campus | Gardens Point | |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) | |
| International fee (indicative) | 2018: \$29,600 per year full-time (96 credit points) | |
| Total credit points | 384 | |
| Start months | February | |
| Int. Start Months | February | |
| Deferment | You can defer your offer and postpone the start of your course for one year. | |
| Course Coordinator | Associate Professor Tim Moroney (Mathematics); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au | |
| Discipline Coordinator | Dr Wayne Kelly (Computer Science); Dr Erwin Fielt (Information Systems); TBA (Applied & Computational Mathematics); Associate Professor Paul Corry (Decision Science); and Associate Professor Chris Drovandi (Statistical Science). | |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Course Overview

Mathematics and information technology are interrelated disciplines. This double degree provides you with the knowledge and skills to develop solutions for complex problems that provide great benefits to society. In the first year you will build a foundation in mathematics and information technology and then select integrated strands combining units from the areas of applied mathematics, computational mathematics, operations research, statistics or financial mathematics with the combined information technology major from either Information Systems of Computer Science.

Career Outcomes

Mathematics underpins much of information technology, especially in the more advanced areas of development and analysis. As a graduate you may find employment as a technical support specialist, data visualisation specialist, operations research specialist, computational scientist, statistician (there is high demand in the insurance industry), or work in complex system and scientific modelling.

Professional Recognition

Graduates will be eligible for membership of the Mathematical Society of Australia, the Statistical Society of Australia and, depending on unit selection, the Australian Society for Operations Research. This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Domestic Course structure

The Bachelor of Mathematics

- component consists of:
 - Six (6) core units (72 credit points -48cp + 24cp core options)
 - Ten (10) major core units (120 credit points).

The Bachelor of Information Technology component consists of:

- Six (6) core units (72 credit points -48cp + 24cp core options)
- Ten (10) major core units (120 credit points).

International Course structure

The Mathematics Component consists of :

- Six (6) Core units (72 credit points - 48cp + 24cp Core options)

- Ten (10) Major Core units (120 credit points)

The Bachelor of Information Technology component consists of:

- Six (6) Core units (72 credit points - 48cp + 24cp Core options)

- Ten (10) Major Core units (120 credit points)

Sample Structure

- Year 1, Semester 1
- Year 1, Semester 2
 Year 2, Semester 1
- Year 2, Semester 1
 Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2

Title

Code



Bachelor of Information Technology/Bachelor of Mathematics

| Bacheler er miermalien reennelog | | |
|----------------------------------|---|--|
| Year 1, Semester | 1 | |
| IFB101 | Impact of IT | |
| IFB102 | Computer Technology Fundamentals | |
| Year 1, Semester | 2 | |
| IFB104 | Building IT Systems | |
| IFB130 | Database Management | |
| Year 2, Semester | 1 | |
| IFB103 | Designing for IT | |
| IT Core Unit Optio | n | |
| Year 2, Semester | 2 | |
| CAB201 | Programming Principles | |
| CAB202 | Microprocessors and Digital Systems | |
| Year 3, Semester | 1 | |
| CAB203 | Discrete Structures | |
| CAB302 | Software Development | |
| Year 3, Semester | 2 | |
| CAB303 | Networks | |
| IFB299 | IT Project Design and Development | |
| Year 4, Semester | 1 | |
| CAB301 | Algorithms and Complexity | |
| IFB398 | Capstone Project (Phase 1) | |
| Year 4, Semester | 2 | |
| IFB399 | Capstone Project (Phase 2) | |
| Select one of: | | |
| CAB401 | High Performance and Parallel Computing | |
| CAB402 | Programming Paradigms | |
| CAB403 | Systems Programming | |

Semesters

- Year 1, Semester 1
- Year 1, Semester 2 •
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2 •
- ٠ Year 4, Semester 1
- Year 4, Semester 2 ٠

| Code | Title |
|--------------------|--|
| Year 1, Semester 1 | |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| Year 1, Semester 2 | |

| IFB104 | Building IT Systems |
|---------------------|--|
| IFB130 | Database Management |
| Year 2, Semester 1 | |
| IFB103 | Designing for IT |
| IT Core Unit Option | |
| Year 2, Semester 2 | |
| IAB201 | Modelling Information Systems |
| IAB202 | Business of Information Technology |
| Year 3, Semester 1 | |
| IAB203 | Business Process Modelling |
| IAB204 | Business Analysis |
| Year 3, Semester 2 | |
| IAB205 | Corporate Systems |
| IFB299 | IT Project Design and Development |
| Year 4, Semester 1 | |
| IFB398 | Capstone Project (Phase 1) |
| Select one of: | |
| IAB302 | Information Systems Consulting |
| IAB303 | Business Intelligence |
| IAB304 | Project Management |
| Year 4, Semester 2 | |
| IAB301 | Enterprise Architecture |
| IFB399 | Capstone Project (Phase 2) |

Semesters

- Applied and Computational Mathematics Major unit set:
- Year 1 Semester 1
- Year 1 Semester 2 •
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2 ٠
- Year 4 Semester 1
- Year 4 Semester 2 •
- NOTE:

| Code | Title | |
|--|---|--|
| Applied and Computational Mathematics Major unit set: | | |
| Year 1 Semester 1 | | |
| MXB102 | Abstract Mathematical Reasoning | |
| Maths Core Options Unit** | | |
| OR | | |
| MXB101 | Probability and Stochastic Modelling 1 | |

| Year 2 Sem | s majors) nester 1 |
|-------------|--|
| MXB101 | Probability and Stochas Modelling 1 |
| | Core Options Unit** (sele MXB101 in first year) |
| MXB103 | Introductory Computati Mathematics |
| | Core Options Unit** (sele MXB103 in first year) |
| Year 2 Serr | nester 2 |
| MXB107 | Introduction to Statistic Modelling |
| Maths Core | Options Unit** |
| Year 3 Sem | • |
| MXB201 | Advanced Linear Algeb |
| MXB221 | Ordinary Differential Equations |
| Year 3 Sem | ester 2 |
| MXB202 | Advanced Calculus |
| MXB222 | Computational Linear Algebra |
| Year 4 Sem | nester 1 |
| MXB321 | Applied Transport The |
| MXB322 | Partial Differential Equations |
| Year 4 Sem | nester 2 |
| MXB323 | Dynamical Systems |
| MXB324 | Computational Fluid Dynamics |
| | |
| NOTE: | |

OR

MXB103

MXB105

Year 1 Semester 2

Introductory Computational

Calculus of One and Two

Linear Algebra and

Mathematics

Variables

- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- <u>NOTE:</u>

Code Title Decision Science Major unit set:

QUI

Bachelor of Information Technology/Bachelor of Mathematics

Year 1 Semester 1 Abstract Mathematical **MXB102** Reasoning Maths Core Options Unit** OR Probability and Stochastic **MXB101** Modelling 1 OR Introductory Computational **MXB103 Mathematics** Year 1 Semester 2 Calculus of One and Two **MXB105** Variables Linear Algebra and **MXB106 Differential Equations** (PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors) Year 2 Semester 1 Probability and Stochastic **MXB101** Modelling 1 OR Maths Core Options Unit** (select if completed MXB101 in first year) Introductory Computational **MXB103** Mathematics OR Maths Core Options Unit** (select if completed MXB103 in first year) Year 2 Semester 2 Introduction to Statistical **MXB107** Modelling Maths Core Options Unit Year 3 Semester 1 **MXB201** Advanced Linear Algebra Probability and Stochastic **MXB241** Modelling 2 OR CAB201 **Programming Principles** Year 3 Semester 2 **MXB202 Advanced Calculus** Introduction to Operations **MXB232** Research Year 4 Semester 1 **MXB332 Optimisation Modelling MXB341** Statistical Inference OR Coding Theory and Graph **MXB351** Theory Year 4 Semester 2 **Operations Research for MXB334** Stochastic Processes **Advanced Optimisation MXB335** Modelling NOTE: ** Only TWO (2) Option units may be

** Only TWO (2) Option units may be taken in these 4 unit-slots.

Semesters • Statistical Science Major unit set: Year 1 Semester 1 Year 1 Semester 2 ٠ Year 2 Semester 1 Year 2 Semester 2 Year 3 Semester 1 Year 3 Semester 2 . Year 4 Semester 1 Year 4 Semester 2 • NOTE: Code Title Statistical Science Major unit set: Year 1 Semester 1 Abstract Mathematical **MXB102** Reasoning Maths Core Options Unit** OR **Probability and Stochastic** MXB101 Modelling 1 OR Introductory Computational **MXB103 Mathematics** Year 1 Semester 2 Calculus of One and Two **MXB105** Variables Linear Algebra and **MXB106 Differential Equations** (PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors) Year 2 Semester 1 Probability and Stochastic **MXB101** Modelling 1 OR Maths Core Options Unit** (select if completed MXB101 in first year) Introductory Computational **MXB103 Mathematics** OR Maths Core Options Unit** (select if completed MXB103 in first year) Year 2 Semester 2 Introduction to Statistical **MXB107** Modelling Maths Core Options Unit** Year 3 Semester 1 **MXB201** Advanced Linear Algebra **MXB242 Regression and Design**

Year 3 Semester 2

Year 4 Semester 1

Year 4 Semester 2

Advanced Calculus

Statistical Inference

Statistical Techniques

Modelling Dependent Data

Modelling 2

Probability and Stochastic

MXB202

MXB241

MXB341

MXB342

MXB343

MXB344 Generalised Linear Models
NOTE:

** Only TWO (2) Option units may be taken in these 4 unit-slots.



Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | SE40 |
| CRICOS | 084922G |
| Duration (full-time) | 5 years |
| OP | 7 |
| Rank | 86 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$32,500 per year full-time (96 credit points) |
| Total credit points | 480 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - (Engineering major); Associate Professor Tim Moroney (Mathematics major); email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Thomas Rainey (Chemical Process), Dr Brian Lee (Civil); Dr Wayne Kelly (Computer & Software Systems); Dr Jacob Coetzee (Electrical); Dr Aaron Mcfadyen (Electrical & Aerospace); Professor Ted Steinberg (Mechanical); Ass. Professor Jason Ford (Mechatronics); Dr Devakar Epari (Medical); TBA (Applied and Computational Mathematics); Associate Prof Paul Corry (Decision Science); and Associate Prof Chris Drovandi (Statistical Science) |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: Chemistry, Mathematics C, Physics.

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: Chemistry, Mathematics C, Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours) in SE40, students are required to complete 288 credit points of course units, as outlined below:

- First year: four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course structure

To graduate with a Bachelor of Engineering (Honours) in SE40, students are required to complete 288 credit points of course units, as outlined below:

- First year: four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp.

Sample Structure

Semesters

- <u>Applied and Computational</u> Mathematics Major unit set:
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- <u>NOTE:</u>

| Code | Title | | |
|--|--|--|--|
| Applied and Computational Mathematics Major unit set: | | | |
| Year 1 Sem | Year 1 Semester 1 | | |
| MXB102 | Abstract Mathematical Reasoning | | |
| Maths Core | Maths Core Options Unit** | | |
| OR | | | |
| MXB101 | Probability and Stochastic Modelling 1 | | |
| OR | | | |
| MXB103 | Introductory Computational Mathematics | | |
| Year 1 Semester 2 | | | |
| Year 1 Sem | ester 2 | | |
| Year 1 Sem MXB105 | ester 2 Calculus of One and Two Variables | | |
| MXB105 MXB106 | Calculus of One and Two Variables Linear Algebra and Differential Equations | | |
| MXB105 MXB106 (PLEASE Ne nominate yo Study Plan t | Calculus of One and Two Variables Linear Algebra and Differential Equations OTE: you will need to our Maths major in your o select MXB105 and nese units are common to all | | |
| MXB105 MXB106 (PLEASE Normoniate yo Study Plan t MXB106. Th | Calculus of One and Two Variables Linear Algebra and Differential Equations OTE: you will need to our Maths major in your o select MXB105 and nese units are common to all majors) | | |
| MXB105 MXB106 (PLEASE Nonominate yo Study Plan t MXB106. Th three Maths | Calculus of One and Two Variables Linear Algebra and Differential Equations OTE: you will need to our Maths major in your o select MXB105 and nese units are common to all majors) | | |

| OR Maths Core Options Unit** (select | if |
|--------------------------------------|----|
| completed MXB101 in first year) | |
| | |

| | MXB103 | Introductory Computational Mathematics |
|---------------------------------------|--------|--|
| OP Mathe Core Optione Lipit** (coloct | | |



| completed MXB103 in first year) | | |
|---------------------------------|--|--|
| Year 2 Sem | ester 2 | |
| MXB107 | Introduction to Statistical Modelling | |
| Maths Core | Options Unit** | |
| Year 3 Sem | ester 1 | |
| MXB201 | Advanced Linear Algebra | |
| MXB221 | Ordinary Differential Equations | |
| Year 3 Semester 2 | | |
| MXB202 | Advanced Calculus | |
| MXB222 | Computational Linear Algebra | |
| Year 4 Sem | ester 1 | |
| MXB321 | Applied Transport Theory | |
| MXB322 | Partial Differential Equations | |
| Year 4 Semester 2 | | |
| MXB323 | Dynamical Systems | |
| MXB324 | Computational Fluid Dynamics | |
| NOTE: | | |
| ** Only TW/ |) (2) Option units may be | |

** Only TWO (2) Option units may be taken in these 4 unit-slots.

Semesters

- Decision Science Major unit set:
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
 Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- NOTE:

| Code | Title | |
|--|--|--|
| Decision Science Major unit set: | | |
| Year 1 Sem | ester 1 | |
| MXB102 | Abstract Mathematical Reasoning | |
| Maths Core | Options Unit** | |
| OR | | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| OR | | |
| MXB103 | Introductory Computational Mathematics | |
| Year 1 Sem | ester 2 | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| (PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to a three Maths majors) | | |

| Year 2 Semester 1 | | |
|---|---|--|
| MXB101 | Probability and Stochastic Modelling 1 | |
| OR Maths Core Options Unit** (select if completed MXB101 in first year) | | |
| MXB103 | Introductory Computational Mathematics | |
| | Core Options Unit** (select if MXB103 in first year) | |
| Year 2 Sem | ester 2 | |
| MXB107 | Introduction to Statistical Modelling | |
| Maths Core | Options Unit | |
| Year 3 Sem | ester 1 | |
| MXB201 | Advanced Linear Algebra | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| OR | | |
| CAB201 | Programming Principles | |
| Year 3 Sem | ester 2 | |
| MXB202 | Advanced Calculus | |
| MXB232 | Introduction to Operations Research | |
| Year 4 Sem | ester 1 | |
| MXB332 | Optimisation Modelling | |
| MXB341 | Statistical Inference | |
| OR | | |
| MXB351 | Coding Theory and Graph Theory | |
| Year 4 Semester 2 | | |
| MXB334 | Operations Research for Stochastic Processes | |
| MXB335 | Advanced Optimisation Modelling | |
| NOTE: | | |
| ** Only TWO (2) Option units may be taken in these 4 unit-slots. | | |

Semesters

- Statistical Science Major unit set:
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- <u>Year 4 Semester 1</u>
 <u>Year 4 Semester 2</u>
- NOTE:
- NOTE:

| Code | Title | |
|-------------------------------------|---|--|
| Statistical Science Major unit set: | | |
| Year 1 Sem | ester 1 | |
| MXB102 | Abstract Mathematical Reasoning | |
| Maths Core Options Unit** | | |
| OR | | |
| MXB101 | Probability and Stochastic Modelling 1 | |

| OR | | |
|--|---|--|
| MXB103 | Introductory Computational Mathematics | |
| Year 1 Sem | ester 2 | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| (PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors) | | |
| Year 2 Sem | ester 1 | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| | Core Options Unit** (select if MXB101 in first year) | |
| MXB103 | Introductory Computational Mathematics | |
| OR Maths Core Options Unit** (select if completed MXB103 in first year) | | |
| Year 2 Semester 2 | | |
| MXB107 | Introduction to Statistical Modelling | |
| Maths Core | Options Unit** | |
| Year 3 Sem | ester 1 | |
| MXB201 | Advanced Linear Algebra | |
| MXB242 | Regression and Design | |
| Year 3 Sem | | |
| MXB202 | Advanced Calculus | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| Year 4 Semester 1 | | |
| MXB341 | Statistical Inference | |
| MXB342 | Statistical Techniques | |
| Year 4 Sem | ester 2 | |
| MXB343 | Modelling Dependent Data | |
| MXB344 | Generalised Linear Models | |
| NOTE: | | |
| ** Only TWO (2) Option units may be | | |
| taken in these 4 unit-slots | | |

taken in these 4 unit-slots.

1

Semesters

| ٠ | Year | 1 - Se | mester |
|---|------|--------|--------|
| | | | |

- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
 Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title |
|---------------------|----------------------------------|
| Year 1 - Semester 1 | |
| EGB113 | Energy in Engineering Systems |



| MZB125 | Introductory Engineering Mathematics |
|-----------------|--|
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semest | er 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | er 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | er 2 |
| EGB120 | Foundations of Electrical Engineering |
| Foundation Unit | Option |
| Year 3 - Semest | er 1 |
| EGB261 | Unit Operations |
| EGB323 | Fluid Mechanics |
| Year 3 - Semest | er 2 |
| CVB101 | General Chemistry |
| EGB322 | Thermodynamics |
| Year 4 - Semest | |
| EGB262 | Process Principles |
| EGB362 | Operations Management and Process Economics |
| Year 4 - Semest | er 2 |
| EGB364 | Process Modelling |
| EGH411 | Industrial Chemistry |
| Year 5 - Semest | |
| EGB361 | Minerals and Minerals Processing |
| EGH400-1 | Research Project 1 |
| EGH404 | Research in Engineering Practice |
| EGH463 | Plant and Process Design |
| Year 5 - Semest | er 2 |
| EGH400-2 | Research Project 2 |
| EGH422 | Advanced Thermodynamics |
| EGH423 | Fluids Dynamics |
| EGH462 | Process Control |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
 Year 3 Semester 1
 Year 3 Semester 2
 Year 4, Semester 1
 Year 4, Semester 1

- Year 4 Semester 2
 Year 5 Semester 1

• Year 5 - Semester 2

| Code | Title |
|---------------------------|--|
| Year 1 - Semest | |
| | Energy in Engineering |
| EGB113 | Systems |
| | Introductory |
| MZB125 | Engineering Mathematics |
| OR | Mathematics |
| | Computational |
| MXB161 | Explorations |
| Year 1 - Semest | er 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | er 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | |
| EGB123 | Civil Engineering Systems |
| Foundation Unit | Option |
| Year 3 - Semest | er 1 |
| EGB270 | Civil Engineering Materials |
| EGB272 | Traffic and Transport Engineering |
| Year 3 - Semest | er 2 |
| EGB273 | Principles of Construction |
| EGB373 | Geotechnical |
| | Engineering |
| Year 4, Semeste | |
| EGB275 | Structural Mechanics |
| EGB371 Year 4 - Semest | Engineering Hydraulics |
| EGB376 | Steel Design |
| | Advanced Water |
| EGH471 | Engineering |
| Year 5 - Semest | er 1 |
| EGB375 | Design of Concrete Structures |
| EGH400-1 | Research Project 1 |
| | Research in |
| EGH404 | Engineering Practice Advanced Geotechnical |
| EGH473 | Engineering |
| Year 5 - Semest | |
| EGH400-2 | Research Project 2 |
| EGH472 | Advanced Highway and Pavement Engineering |
| EGH475 | Advanced Concrete Structures |

| EGH479 | Advances in Civil Engineering Practice | |
|--|---|--|
| Semesters | | |
| Year 1 - Se Year 1 - Se | emester 1 emester 2 | |
| Year 1 - Se Year 2 - Se | emester 1 | |
| Year 2 - Se | emester 2 | |
| Year 3 - Se Year 3 - Se | emester 1 | |
| • <u>Year 4 - Se</u> | | |
| Year 4 - Se Year 5 - Se | emester 2 | |
| Year 5 - Se Year 5 - Se | emester 1 emester 2 | |
| | | |
| Code | Title | |
| Year 1 - Semest | | |
| EGB113 | Energy in Engineering Systems | |
| MZD405 | Introductory | |
| MZB125 | Engineering Mathematics | |
| OR | | |
| | Computational | |
| MXB161 | Explorations | |
| Year 1 - Semest | | |
| EGB100 | Engineering Sustainability and | |
| EGB100 | Professional Practice | |
| | Engineering | |
| MZB126 | Computation | |
| Year 2 - Semest | | |
| E00444 | Foundation of | |
| EGB111 | Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | er 2 | |
| EGB120 | Foundations of | |
| LODIZO | Electrical Engineering | |
| Foundation Unit | - | |
| Year 3 - Semest | er 1 | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB242 | Signal Analysis | |
| Year 3 - Semest | | |
| CAB201 | Programming Principles | |
| Intermediate Electrical Option Unit | | |
| Year 4 - Semest | er 1 | |
| EGB240 | Electronic Design | |
| Intermediate Sof | ftware Option Unit | |
| Year 4 - Semest | er 2 | |
| CAB403 | Systems Programming | |
| Intermediate Ele Option Unit | ctrical or Software | |
| Year 5 - Semest | er 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH400-1 | Research Project 1 | |
| Advanced Electr | ical or Software Option | |
| | | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE40&courseID=32940. CRICOS No.00213J QU

| Unit | | |
|---------------------------------|----------------------------|--|
| EGH456 | Embedded Systems | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH455 | Advanced Systems Design | |
| Advanced Electrical Option Unit | | |
| Advanced Software Option Unit | | |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 Year 2 Semester 2 .
- .
- Year 3 Semester 1 ٠
- Year 3 Semester 2 Year 4 - Semester 1
- Year 4 Semester 2 .
- Year 5 Semester 1
- ٠ Year 5 - Semester 2

Code Title Year 1 - Semester 1 Energy in Engineering **EGB113** Systems Introductory Engineering **MZB125 Mathematics** OR Computational **MXB161** Explorations Year 1 - Semester 2 Engineering Sustainability **EGB100** and Professional Practice **MZB126 Engineering Computation** Year 2 - Semester 1 Foundation of **EGB111 Engineering Design** EGB121 **Engineering Mechanics** Year 2 - Semester 2 Microprocessors and CAB202 **Digital Systems** Foundations of Electrical **EGB120** Engineering Year 3 - Semester 1 **EGB240 Electronic Design** Electromagnetics and EGB241 Machines Year 3 - Semester 2 EGB242 Signal Analysis Intermediate Electrical Option Unit (1) EGB348 can be selected from the list. A requisite waiver for this unit will be granted if you are enrolled in EGB242 at the same time . Year 4 - Semester 1

| EGB340 | Design and Practice |
|---|---------------------|
| Foundation Unit Option | |
| Year 4 - Semester 2 | |
| Intermediate Electrical Option Unit (2) | |

| Year 5 - Semester 1 | | |
|-------------------------------------|----------------------------------|--|
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| Advanced Electrical Option Unit (1) | | |
| Advanced Electrical Option Unit (2) | | |
| Year 5 - Semester 2 | | |
| EGH400-2 Research Project 2 | | |
| Advanced Electrical Option Unit (3) | | |
| Advanced Electrical Option Unit (4) | | |
| Advanced Electrical Option Unit (5) | | |
| | | |

Intermediate Electrical Option Unit (3)

Semesters

- Year 1 Semester 1
- Year 1 Semester 2 .
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title | |
|-------------------------------------|--|--|
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | ter 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | ter 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semester 2 | | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit Option | | |
| Year 3 - Semest | ter 1 | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB240 | Electronic Design | |
| Year 3 - Semester 2 | | |
| EGB242 | Signal Analysis | |
| Intermediate Electrical Option Unit | | |
| Year 4 - Semest | ter 1 | |
| EGB243 | Aircraft Systems and Flight | |
| EGB349 | Systems Engineering | |

| | and Design Project | |
|---------------------------------|---------------------------------------|--|
| Year 4 - Semest | er 2 | |
| EGB345 | Control and Dynamic Systems | |
| EGB346 | Unmanned Aircraft Systems | |
| Year 5 - Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH446 | Autonomous Systems | |
| Advanced Electrical Option Unit | | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH445 | Modern Control | |
| EGH450 | Advanced Unmanned Aircraft Systems | |
| Advanced Electrical Option Unit | | |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 ٠
- Year 2 Semester 2 •
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title | |
|------------------------|--|--|
| Year 1 - Semest | er 1 | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | er 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | er 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit Option | | |
| Year 3 - Semest | er 1 | |
| EGB210 | Fundamentals of Mechanical Design | |
| EGB214 | Materials and | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE40&courseID=32940. CRICOS No.00213J



| | Manufacturing | |
|---------------------|-------------------------------------|--|
| Year 3 - Semest | ter 2 | |
| EGB211 | Dynamics | |
| EGB314 | Strength of Materials | |
| Year 4 - Semester 1 | | |
| EGB321 | Dynamics of Machines | |
| EGB323 | Fluid Mechanics | |
| Year 4 - Semester 2 | | |
| EGB322 | Thermodynamics | |
| EGH404 | Research in Engineering Practice | |
| Year 5 - Semester 1 | | |
| EGB316 | Design of Machine Elements | |
| EGH400-1 | Research Project 1 | |
| EGH414 | Stress Analysis | |
| EGH421 | Vibration and Control | |
| Year 5 - Semest | ter 2 | |
| EGH400-2 | Research Project 2 | |
| EGH420 | Mechanical Systems Design | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2 Year 3 Semester 1 ٠ .
- Year 3 - Semester 2
- Year 4 Semester 1
- •
- Year 4 Semester 2 Year 5 Semester 1 ٠
- Year 5 Semester 2

| Code | Title | |
|---------------------|--|--|
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semester 2 | | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semester 1 | | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semester 2 | | |
| EGB120 | Foundations of | |

| | Electrical Engineering | |
|---------------------------------|--|--|
| Foundation Unit | • • | |
| Year 3 - Semest | er 1 | |
| EGB211 | Dynamics | |
| EGB242 | Signal Analysis | |
| Year 3 - Semest | er 2 | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB345 | Control and Dynamic Systems | |
| Year 4 - Semester 1 | | |
| EGB220 | Mechatronics Design 1 | |
| EGB321 | Dynamics of Machines | |
| Year 4 - Semest | er 2 | |
| EGB320 | Mechatronics Design 2 | |
| Intermediate Ele | ctrical Option Unit | |
| Year 5 - Semest | er 1 | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH419 | Mechatronics Design 3 | |
| EGH446 | Autonomous Systems | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH413 | Advanced Dynamics | |
| EGH445 | Modern Control | |
| Advanced Electrical Option Unit | | |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
 Year 2 Semester 2
- Year 3 Semester 1 Year 3 - Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title | |
|---------------------|--|--|
| Year 1 - Semest | er 1 | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semester 1 | | |
| EGB111 | Foundation of Engineering Design | |

| EGB121 Engineering Mecha | anics | |
|---|-------|--|
| Year 2 - Semester 2 | | |
| EGB120 Foundations of Electrical Engineer | ing | |
| Foundation Unit Option | | |
| Year 3 - Semester 1 | | |
| EGB210 Fundamentals of Mechanical Design | ı | |
| LSB131 Anatomy | | |
| Year 3 - Semester 2 | | |
| EGB211 Dynamics | | |
| LSB231 Physiology | | |
| Year 4 - Semester 1 | | |
| EGB214 Materials and Manufacturing | | |
| EGB323 Fluid Mechanics | | |
| Year 4 - Semester 2 | | |
| EGB314 Strength of Materia | als | |
| EGH404 Research in Engineering Practic | се | |
| Year 5 - Semester 1 | | |
| EGB319 BioDesign | | |
| EGH400-1 Research Project 1 | l | |
| | | |
| EGH414 Stress Analysis | | |
| EGH418 Biomechanics | | |
| | | |
| EGH418 Biomechanics | 2 | |
| EGH418BiomechanicsYear 5 - Semester 2 | 2 | |
| EGH418BiomechanicsYear 5 - Semester 2EGH400-2Research Project 2 | | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE40&courseID=32940. CRICOS No.00213J



Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | SE50 |
| CRICOS | 080489G |
| Duration (full-time) | 4 years |
| Duration (part-time domestic) | 8 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$32,500 per year full-time (96 credit points) |
| Total credit points | 384 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Science Coordinator Dr Graham Johnson; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Marion Bateson (Biological Sciences); Dr James Blinco (Chemistry); Dr Luke Nothdurft (Earth Science); Dr Andrew Baker (Environmental Science); Prof Nunzio Motto (Physics); Dr Wayne Kelly (Computer Science); and Dr Erwin Fielt (Information Systems). |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: At least one of biology, chemistry, earth science, maths c or physics.

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: At least one of biology, chemistry, earth science, maths c or physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

This double degree prepares you for an increasing range of careers that involve the application of information technology to science. It gives you the ability to use creative as well as analytical methods to solve scientific problems. Studying this double degree allows you to develop the technical skills required for your relevant field of study in science.

The science component of the course offers you the choice of majoring in Biological Sciences, Physics, Chemistry, Environmental Science or Earth Sciences. Theoretical aspects are balanced by strong practical components in this science and information technology double degree.

The Information Technology component of this degree offers a choice of majors in Information Systems or Computer Science.

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Career Outcomes

Graduates may find roles where they can use their information technology skills within the science discipline. Areas include sensor networks, complex system and scientific modelling, and science. As a graduate, you can expect to work in roles such as a scientific modeller, engineering software developer, scientific programmer, and computational scientist.

Domestic Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Science program and 192 credit points from the Bachelor of Information Technology program.

Science component:

- 6 Science Core units (72 credit points), includes 2 units (24 credit points) of Option Units selected from an approved list.
- 10 Major Core units (120 credit points)

Science component from 2018

- 5 Science Core units (60 credit points), includes 1 core option unit(12 credit points)
- 11 Major Core units (132 credit points)

Information

Technology component:

- 6 Information Technology Core units (72 credit points), includes 2 units (24 credit points) of Option Units** selected from an approved list.
- 10 Major Core units (120 credit points)

** Options List - comprises a range of units from which you choose to undertake two (2). You are able to undertake these options in any semester. The options include introductory units from a wide variety of disciplines offered at QUT.

International Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Science program and 192 credit points from the



Bachelor of Information Technology program.

Science component:

- 6 Science Core units (72 credit points), includes 2 units (24 credit points) of Option Units selected from an approved list.
- 10 Major Core units (120 credit points)

Science component from 2018

- 5 Science Core units (60 credit points), includes 1 core option unit(12 credit points)
- 11 Major Core units (132 credit points)

Information Technology component:

- 6 Information Technology Core units (72 credit points), includes 2 units (24 credit points) of Option Units** selected from an approved list.
- 10 Major Core units (120 credit points)

** Options List - comprises a range of units from which you choose to undertake two (2). You are able to undertake these options in any semester. The options include introductory units from a wide variety of disciplines offered at QUT.

Sample Structure **Semesters**

Semester 1 (February)

- **commencements**
- Year 1, Semester 1 . •
- Year 1, Semester 2 Year 2, Semester 1 ٠
- Year 2, Semester 2 •
- Year 3, Semester 1 ٠
- •
- Year 3, Semester 2 Year 4, Semester 1 .
- Year 4, Semester 2
- . Semester 2 (July) commencements
- Year 1, Semester 2 Year 2, Semester 1 •
- ٠
- Year 2, Semester 2 •
- Year 3, Semester 1
- Year 3, Semester 2 .
- Year 4, Semester 1
- Year 4, Semester 2 Year 5, Semester 1 .

| Code | Title |
|-------------------------------------|--|
| Semester 1 (February) commencements | |
| Year 1, Semester 1 | |
| (No IT units) | |
| Year 1, Semester 2 | |
| IFB102 | Computer Technology Fundamentals |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |

| IFB130 | Database Management |
|--------------------|---|
| Year 2, Semester | 1 |
| IFB101 | Impact of IT |
| CAB201 | Programming Principles |
| Year 2, Semester | 2 |
| CAB202 | Microprocessors and Digital Systems |
| IT Core Unit Optic | |
| Year 3, Semester | |
| CAB203 | Discrete Structures |
| CAB302 | Software Development |
| Year 3, Semester | |
| IFB299 | IT Project Design and Development |
| CAB303 | Networks |
| Year 4, Semester | |
| CAB301 | Algorithms and Complexity |
| IFB398 | Capstone Project (Phase 1) |
| Year 4, Semester | 2 |
| IFB399 | Capstone Project (Phase 2) |
| Select one of: | |
| CAB401 | High Performance and Parallel Computing |
| CAB402 | Programming Paradigms |
| CAB403 | Systems Programming |
| Semester 2 (July) | commencements |
| Year 1, Semester | 2 |
| IFB102 | Computer Technology Fundamentals |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| IFB130 | Database Management |
| Year 2, Semester | 1 |
| (No IT units) | |
| Year 2, Semester | |
| IFB101 | Impact of IT |
| Year 3, Semester | |
| CAB201 | Programming Principles |
| CAB202 | Microprocessors and Digital Systems |
| Year 3, Semester | 2 |
| CAB303 | Networks |
| IFB299 | IT Project Design and Development |

| CAB203 | Discrete Structures | |
|--|---|--|
| CAB301 | Algorithms and Complexity | |
| Year 4, Semester 2 | | |
| IFB398 | Capstone Project (Phase 1) | |
| Year 5, Semester 1 | | |
| CAB302 | Software Development | |
| IFB399 | Capstone Project (Phase 2) | |
| IT Core Unit Option | | |
| Select one of: | | |
| CAB401 | High Performance and Parallel Computing | |
| CAB402 | Programming Paradigms | |
| CAB403 | Systems Programming | |
| (CAB401 or CAB403 can be swapped with Science Core Unit Option in Y4S2.) | | |
| | | |

Semesters

| Jemester 5 | | |
|---|---|--|
| Semester 1 (| February) | |
| commencem | ents | |
| Year 1, Semester 1 | | |
| Year 1, Seme | | |
| Year 2, Seme | | |
| Year 2, Seme | | |
| Year 3, Seme | ester 1 | |
| Year 3, Semester 2 | | |
| Year 4, Semester 1 | | |
| Year 4, Seme | ester 2 | |
| Semester 2 (Veer 1 Seme | July) commencements | |
| Year 1, Seme Year 2, Seme | $\frac{2S(ef Z)}{2}$ | |
| Year 2, Seme | | |
| Year 3, Seme | ester 1 | |
| Year 3, Seme | ester 2 | |
| Year 4, Seme | ester 1 | |
| Year 4, Seme | ester 2 | |
| Year 5, Seme | ester 1 | |
| | | |
| Code | Title | |
| Semester 1 (February) commencements | | |
| Semester 1 (Febru | uary) commencements | |
| Semester 1 (Febru Year 1, Semester | | |
| | | |
| Year 1, Semester | 1 | |
| Year 1, Semester (No IT units) | 2 | |
| Year 1, Semester (No IT units) | 2 Computer | |
| Year 1, Semester (No IT units) Year 1, Semester | 2 | |
| Year 1, Semester (No IT units) Year 1, Semester | 2 Computer Technology Fundamentals | |
| Year 1, Semester (No IT units) Year 1, Semester IFB102 | 2 Computer Technology Fundamentals Designing for IT | |
| Year 1, Semester (No IT units) Year 1, Semester IFB102 IFB103 | 2 Computer Technology Fundamentals Designing for IT Building IT Systems | |
| Year 1, Semester (No IT units) Year 1, Semester IFB102 IFB103 | 1 Computer Technology Fundamentals Designing for IT Building IT Systems Database | |
| Year 1, Semester (No IT units) Year 1, Semester IFB102 IFB103 IFB104 IFB130 | 1 2 Computer Technology Fundamentals Designing for IT Building IT Systems Database Management | |
| Year 1, Semester (No IT units) Year 1, Semester 2 IFB102 IFB103 IFB104 IFB130 Year 2, Semester | 2 Computer Technology Fundamentals Designing for IT Building IT Systems Database Management 1 | |
| Year 1, Semester (No IT units) Year 1, Semester IFB102 IFB103 IFB104 IFB130 | 1 2 Computer Technology Fundamentals Designing for IT Building IT Systems Database Management | |
| Year 1, Semester (No IT units) Year 1, Semester 2 IFB102 IFB103 IFB104 IFB130 Year 2, Semester | 2 Computer Technology Fundamentals Designing for IT Building IT Systems Database Management 1 | |
| Year 1, Semester (No IT units) Year 1, Semester 2 IFB102 IFB103 IFB104 IFB130 Year 2, Semester | 1 2 Computer Technology Fundamentals Designing for IT Building IT Systems Database Management 1 Impact of IT | |
| Year 1, Semester (No IT units) Year 1, Semester IFB102 IFB103 IFB104 IFB130 Year 2, Semester IFB101 | 1 2 Computer Technology Fundamentals Designing for IT Building IT Systems Database Management 1 Impact of IT Modelling Information | |
| Year 1, Semester (No IT units) Year 1, Semester IFB102 IFB103 IFB104 IFB130 Year 2, Semester IFB101 | 2 2 Computer Technology Fundamentals 0 Designing for IT Building IT Systems Database Management 1 Impact of IT Modelling Information Systems | |

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE50&courseID=32941. CRICOS No.00213J

Year 4, Semester 1



| Dachelor of Oci | |
|------------------------------|---|
| IAB202 | Business of Information Technology |
| IT Core Unit Option | 1 |
| Year 3, Semester 1 | |
| IAB203 | Business Process Modelling |
| IAB204 | Business Analysis |
| Year 3, Semester 2 | |
| IFB299 | IT Project Design and Development |
| IAB205 | Corporate Systems |
| Year 4, Semester 1 | |
| IFB398 | Capstone Project (Phase 1) |
| Select one of: | |
| IAB302 | Information Systems Consulting |
| IAB303 | Business Intelligence |
| IAB304 | Project Management |
| Year 4, Semester 2 | |
| IFB399 | Capstone Project (Phase 2) |
| IAB301 | Enterprise Architecture |
| Semester 2 (July) c | |
| Year 1, Semester 2 | |
| IFB102 | Computer Technology Fundamentals |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| IFB130 | Database Management |
| Year 2, Semester 1 | |
| (No IT units) | |
| Year 2, Semester 2 | |
| IFB101 | Impact of IT |
| Year 3, Semester 1 IAB201 | Modelling Information |
| IAB202 | Systems Business of Information Technology |
| Year 3, Semester 2 | ÷. |
| IAB205 | Corporate Systems |
| IFB299 | IT Project Design and Development |
| Year 4, Semester 1 | - |
| IAB203 | Business Process Modelling |
| IAB204 | Business Analysis |
| Year 4, Semester 2 | |
| IAB301 | Enterprise |

| | Architecture |
|---------------------|-----------------------------------|
| IFB398 | Capstone Project (Phase 1) |
| Year 5, Semester 1 | |
| IFB399 | Capstone Project (Phase 2) |
| IT Core Unit Option | |
| Select one of: | |
| IAB302 | Information Systems Consulting |
| IAB303 | Business Intelligence |
| IAB304 | Project Management |

Semesters

| Semesters | | |
|---|--|--|
| Semester 1 (February) | | |
| commencements | | |
| Year 1, Semester 1 | | |
| Year 1, Semester 2 | | |
| • <u>Year 2, S</u> | Semester 1 | |
| | Semester 2 | |
| | Semester 1 | |
| | Semester 2 Semester 1 | |
| • <u>Year 4, S</u> | | |
| | r 2 (July) commencements | |
| | Semester 2 | |
| | Semester 1 | |
| Year 2, S | Semester 2 | |
| Year 3, 5 | Semester 1 | |
| Year 3, 5 | Semester 2 | |
| | Semester 1 | |
| • <u>Year 4, S</u> | | |
| Year 5, 5 | semester 1 | |
| Code | Title | |
| Semester 1 (F | ebruary) commencements | |
| Year 1, Seme | ster 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 1, Seme | ster 2 | |
| (No Science u | nits) | |
| Year 2, Seme | ster 1 | |
| Science Core | Unit Option | |
| Science Major Unit Option | | |
| Year 2, Seme | ster 2 | |
| BVB101 | Foundations of Biology | |
| BVB102 | Evolution | |
| Year 3, Seme | ster 1 | |
| BVB202 | Experimental Design and Quantitative Methods | |
| BVB301 | Animal Biology | |
| Year 3, Seme | ster 2 | |
| BVB201 | Biological Processes | |
| BVB204 | Ecology | |
| D V D L V T | _00099 | |

| Year 4, Seme | ester 1 | | |
|---|---|--|--|
| BVB203 | Plant Biology | | |
| BVB305 | Microbiology and the Environment | | |
| Year 4, Seme | ester 2 | | |
| BVB304 | Integrative Biology | | |
| BVB313 | Population Genetics and Molecular Ecology | | |
| Semester 2 (| July) commencements | | |
| Year 1, Seme | ester 2 | | |
| (No Science | | | |
| Year 2, Seme | ester 1 | | |
| SEB104 | Grand Challenges in Science | | |
| SEB113 | Quantitative Methods in Science | | |
| SEB115 | Experimental Science 1 | | |
| SEB116 | Experimental Science 2 | | |
| Year 2, Seme | ester 2 | | |
| BVB101 | Foundations of Biology | | |
| BVB102 | Evolution | | |
| Science Majo | or Unit Option | | |
| Year 3, Seme | ester 1 | | |
| BVB202 | Experimental Design and Quantitative Methods | | |
| BVB301 | Animal Biology | | |
| Year 3, Seme | ester 2 | | |
| BVB201 | Biological Processes | | |
| BVB204 | Ecology | | |
| Year 4, Seme | ester 1 | | |
| BVB203 | Plant Biology | | |
| BVB305 | Microbiology and the Environment | | |
| Year 4, Seme | ester 2 | | |
| BVB304 | Integrative Biology | | |
| BVB313 | Population Genetics and Molecular Ecology | | |
| Computer Science major students - Select Science Core Unit Option here or | | | |
| swap with Computer Science Major Unit Option in Y5S1. | | | |
| Year 5, Semester 1 | | | |
| Information Systems major students - Select Science Core Unit Option here. | | | |
| Semesters | | | |
| <u>Semester 1 (February)</u> <u>commencements</u> | | | |

- commencements Year 1, Semester 1 Year 1, Semester 2 Year 2, Semester 1 Year 2, Semester 1 Year 2, Semester 1

- Year 3, Semester 1
- Year 3, Semester 2
 Year 4, Semester 1
- Year 4, Semester 2
- Semester 2 (July) commencements
- Year 1, Semester 2
 Year 2, Semester 1



| ٠ | Year 2, | Semester 2 |
|---|---------|------------|
| | | |

- Year 3, Semester 1
- Year 3, Semester 2 ٠
- Year 4, Semester 1 Year 4, Semester 2 ٠
- Year 5, Semester 1

| Code | Title | |
|--------------------|--|--|
| | ebruary) commencements | |
| Year 1, Seme | | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 1, Seme | | |
| (No Science u | , | |
| Year 2, Seme | ster 1 | |
| MXB100 | Introductory Calculus and Algebra | |
| Science Core | Unit Option | |
| Year 2, Seme | ster 2 | |
| CVB101 | General Chemistry | |
| CVB102 | Chemical Structure and Reactivity | |
| Year 3, Seme | ster 1 | |
| CVB201 | Inorganic Chemistry | |
| CVB202 | Analytical Chemistry | |
| Year 3, Seme | ster 2 | |
| CVB203 | Physical Chemistry | |
| CVB204 | Organic Structure and Mechanisms | |
| Year 4, Seme | ster 1 | |
| CVB301 | Organic Chemistry: Strategies for Synthesis | |
| CVB302 | Applied Physical Chemistry | |
| Year 4, Seme | ster 2 | |
| CVB303 | Coordination Chemistry | |
| CVB304 | Chemistry Research Project | |
| Semester 2 (J | luly) commencements | |
| Year 1, Seme | ster 2 | |
| (No Science u | inits) | |
| Year 2, Seme | ster 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 2, Semester 2 | | |
| CVB101 | General Chemistry | |
| CVB102 | Chemical Structure and Reactivity | |
| MXB100 | Introductory Calculus and | |

| | Algebra | |
|-----------------------------------|--|--|
| Year 3, Semester 1 | | |
| CVB201 | Inorganic Chemistry | |
| CVB202 | Analytical Chemistry | |
| Year 3, Seme | ster 2 | |
| CVB203 | Physical Chemistry | |
| CVB204 | Organic Structure and Mechanisms | |
| Year 4, Seme | ster 1 | |
| CVB301 | Organic Chemistry: Strategies for Synthesis | |
| CVB302 | Applied Physical Chemistry | |
| Year 4, Semester 2 | | |
| CVB303 | Coordination Chemistry | |
| CVB304 | Chemistry Research Project | |
| Computer Science major students - | | |

er Science major πp Select Science Core Unit Option here or swap with Computer Science Major Unit Option in Y5S1.

Year 5, Semester 1

Information Systems major students -Select Science Core Unit Option here.

Semesters

- Semester 1 (February) **commencements** Year 1, Semester 1 Year 1, Semester 2
 Year 2, Semester 1 • Year 2, Semester 2 Year 3, Semester 1 Year 3, Semester 2 • Year 4, Semester 1 • Year 4, Semester 2 Semester 2 (July) commencements
- Year 1, Semester 2
- Year 2, Semester 1
 Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
 Year 4, Semester 2
- Year 5, Semester 1

| Code | Title | |
|---------------------------|---------------------------------|--|
| Semester 1 (F | ebruary) commencements | |
| Year 1, Seme | ster 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 1, Semester 2 | | |
| (No Science units) | | |
| Year 2, Semester 1 | | |
| Science Core Unit Option | | |
| Science Major Unit Option | | |
| Year 2, Semester 2 | | |

| ERB101 | Earth Systems |
|---------------|--|
| ERB102 | Evolving Earth |
| Year 3, Seme | ster 1 |
| ERB201 | Destructive Earth: Natural Hazards |
| ERB202 | Marine Geoscience |
| Year 3, Seme | ster 2 |
| ERB203 | Sedimentary Geology and Stratigraphy |
| ERB204 | Deforming Earth: Fundamentals of Structural Geology |
| Year 4, Seme | ster 1 |
| ERB301 | Chemical Earth |
| ERB302 | Applied Geophysics |
| Year 4, Seme | |
| ERB303 | Energy Resources and Basin Analysis |
| ERB304 | Dynamic Earth: Plate Tectonics |
| | luly) commencements |
| Year 1, Seme | |
| (No Science L | , |
| Year 2, Seme | |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| SEB115 | Experimental Science 1 |
| SEB116 | Experimental Science 2 |
| Year 2, Seme | |
| ERB101 | Earth Systems |
| ERB102 | Evolving Earth |
| Science Majo | - |
| Year 3, Seme | ster 1 |
| ERB201 | Destructive Earth: Natural Hazards |
| ERB202 | Marine Geoscience |
| Year 3, Seme | ster 2 |
| ERB203 | Sedimentary Geology and Stratigraphy |
| ERB204 | Deforming Earth: Fundamentals of Structural Geology |
| Year 4, Seme | ster 1 |
| ERB301 | Chemical Earth |
| ERB302 | Applied Geophysics |
| Year 4, Seme | ster 2 |
| ERB303 | Energy Resources and Basin Analysis |
| ERB304 | Dynamic Earth: Plate Tectonics |
| Select Scienc | ence major students - e Core Unit Option here or mputer Science Major Unit 1. |

Year 5, Semester 1

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE50&courseID=32941. CRICOS No.00213J



Information Systems major students -Select Science Core Unit Option here.

Semesters

- Semester 1 (February)
- <u>commencements</u>
- Year 1, Semester 1
- Year 1, Semester 2
 Year 2, Semester 1
- Year 2, Semester 1
 Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Semester 2 (July) commencements
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- <u>Year 4, Semester 1</u>
- Year 4, Semester 2
- Year 5, Semester 1

Code Title Semester 1 (February) commencements Year 1, Semester 1 Grand Challenges in **SEB104** Science Quantitative Methods in **SEB113** Science **Experimental Science 1 SEB115 Experimental Science 2 SEB116** Year 1, Semester 2 (No Science units)

Year 2, Semester 1

Science Core Unit Option

Science Major Unit Ontion

| Science Major Unit Option | | |
|---------------------------------|---|--|
| Year 2, Semester 2 | | |
| ERB101 | Earth Systems | |
| EVB102 | Ecosystems and the Environment | |
| Year 3, Seme | ster 1 | |
| BVB202 | Experimental Design and Quantitative Methods | |
| EVB203 | Geospatial Information Science | |
| Year 3, Seme | ster 2 | |
| BVB204 | Ecology | |
| EVB302 | Environmental Pollution | |
| Year 4, Seme | ster 1 | |
| BVB311 | Conservation Biology | |
| EVB312 | Soils and the Environment | |
| Year 4, Semester 2 | | |
| ERB310 | Groundwater Systems | |
| EVB304 | Case Studies in Environmental Science | |
| Semester 2 (July) commencements | | |
| Year 1, Semester 2 | | |

| (No Science units) | | |
|-----------------------------------|--|--|
| Year 2, Semester 1 | | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 2, Seme | ster 2 | |
| ERB101 | Earth Systems | |
| EVB102 | Ecosystems and the Environment | |
| Science Major | r Unit Option | |
| Year 3, Seme | ster 1 | |
| BVB202 | Experimental Design and Quantitative Methods | |
| EVB203 | Geospatial Information Science | |
| Year 3, Seme | ster 2 | |
| BVB204 | Ecology | |
| EVB302 | Environmental Pollution | |
| Year 4, Semester 1 | | |
| BVB311 | Conservation Biology | |
| EVB312 | Soils and the Environment | |
| Year 4, Semester 2 | | |
| ERB310 | Groundwater Systems | |
| EVB304 | Case Studies in Environmental Science | |
| Computer Science major students - | | |

Computer Science major students -Select Science Core Unit Option here or swap with Computer Science Major Unit Option in Y5S1.

Year 5, Semester 1

Information Systems major students -Select Science Core Unit Option here.

Semesters

| omostor 1 (E | obruary) c | ommencements |
|------------------------------------|--------------|---------------|
| ode | Title | |
| <u>10010, 0</u> | /011100101 1 | • |
| • Year 5, 5 | | |
| • Year 4, S | | |
| • Year 4, 5 | | |
| • Year 3, 5 | | |
| • Year 3, 5 | Semester 1 | - |
| • Year 2, S | | |
| • Year 2, 5 | Semester 1 | - |
| • Year 1, S | Semester 2 | |
| <u>Semeste</u> | r 2 (July) c | commencements |
| Year 4, 5 | Semester 2 |) = |
| Year 4, 5 | Semester 1 | _ |
| Year 3, 5 | | |
| Year 3, 5 | Semester 1 | - |
| Year 2, 5 | | |
| Year 2, 5 | | - |
| • <u>Year 1, S</u> | Semester 2 | - |
| • <u>Year 1, S</u> | | |
| <u>commen</u> | | |
| <u>Semeste</u> | | <u>ary)</u> |
| • | | |

| Coue | THUE |
|--------------------|------------------------|
| Semester 1 (F | ebruary) commencements |
| Year 1, Semester 1 | |
| | |

Grand Challenges in **SEB104** Science Quantitative Methods in **SEB113** Science **SEB115 Experimental Science 1 Experimental Science 2 SEB116** Year 1, Semester 2 (No Science units) Year 2, Semester 1 Introductory Calculus and **MXB100** Algebra Science Core Unit Option Year 2, Semester 2 **PVB101** Physics of the Very Large **PVB102** Physics of the Very Small Year 3, Semester 1 Computational and **PVB200** Mathematical Physics **PVB203 Experimental Physics** Year 3, Semester 2 Mathematical Methods in **PVB202** Physics **PVB204** Electromagnetism Year 4, Semester 1 Materials and Thermal **PVB301** Physics Classical and Quantum **PVB302** Physics Year 4, Semester 2 Nuclear and Particle **PVB303** Physics **PVB304** Physics Research Semester 2 (July) commencements Year 1, Semester 2 (No Science units) Year 2, Semester 1 Grand Challenges in **SEB104** Science Quantitative Methods in **SEB113** Science SEB115 **Experimental Science 1 SEB116 Experimental Science 2** Year 2, Semester 2 Introductory Calculus and **MXB100** Algebra **PVB101** Physics of the Very Large **PVB102** Physics of the Very Small Year 3, Semester 1 Computational and **PVB200** Mathematical Physics **PVB203 Experimental Physics** Year 3, Semester 2 Mathematical Methods in **PVB202** Physics **PVB204** Electromagnetism Year 4, Semester 1

| PVB301 | Materials and Thermal Physics | |
|--------------------|--|--|
| PVB302 | Classical and Quantum Physics | |
| Year 4, Semester 2 | | |
| PVB303 | Nuclear and Particle Physics | |
| PVB304 | Physics Research | |
| Select Science | ence major students - e Core Unit Option here or nputer Science Major Unit 1. | |

Year 5, Semester 1

Information Systems major students -Select Science Core Unit Option here.



QUT

Bachelor of Engineering (Honours)/Bachelor of Information Technology

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | SE60 |
| CRICOS | 084923F |
| Duration (full-time) | 5 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$32,400 per year full-time (96 credit points) |
| Total credit points | 480 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Thomas Rainey (Chemical Process), Dr Brian Lee (Civil); Dr Wayne Kelly (Computer & Software Systems); Dr Jacob Coetzee (Electrical); Dr Aaron Mcfadyen (Electrical & Aerospace); Professor Ted Steinberg (Mechanical); Associate Professor Jason Ford (Mechatronics); Dr Devakar Epari (Medical); Dr Wayne Kelly (Computer Science); and Dr Erwin Fielt (Information Systems). |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours) in SE60, students are required to complete 288 credit points of course units, as outlined below:

- First year: four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course structure

To graduate with a Bachelor of Engineering (Honours) in SE60, students are required to complete 288 credit points of course units, as outlined below:

- First year: four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

Sample Structure PLEASE NOTE:

For students taking the IT: Computer Science major with Engineering: Computer & Software Systems major, please refer to the "IT Units: Computer Science/Eng Computer Software Sys Majors ONLY (SE60MJR-CSSES)" structure instead.

Semesters

- Semester 1 (February) **commencements**
- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2 Year 3, Semester 1
- •
- Year 3, Semester 2
- Year 4, Semester 1 Year 4, Semester 2
- Semester 2 (July) commencements •
- Year 1, Semester 2
- Year 2, Semester 1
- ٠ Year 2, Semester 2
- . Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 •
- Year 4, Semester 2
- Year 5, Semester 1
- **Computer Science Major Unit Options**

Code Title

| 00000 | 11110 | |
|-------------------------------------|---|--|
| Semester 1 (February) commencements | | |
| Year 1, Semester 1 | | |
| IFB101 | Impact of IT | |
| IFB102 | Computer Technology Fundamentals | |
| OR | | |
| IFB130 | Database Management | |
| Year 1, Semester 2 | | |
| Year 1, Se | emester 2 | |
| Year 1, Se IFB130 | emester 2 Database Management | |
| | | |
| IFB130 | | |
| IFB130 OR | Database Management Computer Technology | |
| IFB130 OR IFB102 | Database Management Computer Technology Fundamentals Building IT Systems | |



IFB103 Designing for IT For Engineering students majoring in: Civil, Mechanical, Medical or Process/Chemical Process major -IT Core Unit Option For Engineering students majoring in: Electrical, Electrical & Aerospace or Mechatronics major -CAB201 Programming Principles Year 2, Semester 2 For Engineering students majoring in: Civil. Mechanical. Medical or Process/Chemical Process major -CAB201 Programming Principles Microprocessors and Digital CAB202 Systems (Note: Select CAB202 from the Computer Science Major Option list this is compulsory in the IT component if majoring in these engineering majors.) For Engineering students majoring in: Electrical, Electrical & Aerospace or Mechatronics major -**IT Core Unit Option** Computer Science Major Unit Option 1 (Note: CAB202 will be available as core in the engineering component if majoring in these engineering majors.) Year 3, Semester 1 CAB203 Discrete Structures CAB302 Software Development Year 3, Semester 2 CAB303 Networks IT Project Design and **IFB299** Development Year 4, Semester 1 CAB301 Algorithms and Complexity **IFB398** Capstone Project (Phase 1) Year 4, Semester 2 **IFB399** Capstone Project (Phase 2) Computer Science Major Unit Option 2 Semester 2 (July) commencements Year 1. Semester 2 IFB101 Impact of IT Computer Technology IFB102 **Fundamentals** Year 2, Semester 1 **IFB103** Designing for IT IFB104 **Building IT Systems** Year 2, Semester 2 CAB201 **Programming Principles IFB130 Database Management** Year 3, Semester 1 CAB203 **Discrete Structures** For Engineering students majoring in:

| CAB202 | Microprocessors and Digital Systems | |
|---|--|--|
| For Engineering students majoring in: Electrical, Electrical & Aerospace or Mechatronics major - | | |
| | Science Major Unit Option 1 | |
| Year 3, Se | emester 2 | |
| CAB303 | Networks | |
| IFB299 | IT Project Design and Development | |
| Year 4, Se | | |
| CAB301 | Algorithms and Complexity | |
| CAB302 | Software Development | |
| Year 4, Se | | |
| IFB398 | Capstone Project (Phase 1) | |
| IT Core U | nit Option | |
| OR | | |
| | Science Major Unit Option 2 | |
| Year 5, Se IFB399 | | |
| | Capstone Project (Phase 2) | |
| OR | Science Major Unit Option 2 | |
| - | nit Ontion | |
| IT Core U | | |
| (Select IT Core Unit Option here, if not selected previously.) | | |
| | previously.) | |
| selected p | oreviously.) Science Major Unit Options | |
| selected p | | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will co | Science Major Unit Options Microprocessors and Digital | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will co | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your | |
| selected p Computer CAB202 (CAB202 Engineerin Software s & Aerospa you will co Engineerin | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ng component.) Fundamentals of Data | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will co Engineerin CAB220 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ng component.) Fundamentals of Data Science | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will cc Engineerin CAB220 CAB320 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ng component.) Fundamentals of Data Science Artificial Intelligence | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will cc Engineerin CAB220 CAB320 CAB340 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ng component.) Fundamentals of Data Science Artificial Intelligence Cryptography High Performance and | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will co Engineerin CAB220 CAB320 CAB340 CAB401 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ng component.) Fundamentals of Data Science Artificial Intelligence Cryptography High Performance and Parallel Computing | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will cc Engineerin CAB220 CAB320 CAB320 CAB340 CAB401 CAB402 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ing major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which implete CAB202 in your ing component.) Fundamentals of Data Science Artificial Intelligence Cryptography High Performance and Parallel Computing Programming Paradigms | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will cc Engineerin CAB220 CAB320 CAB320 CAB340 CAB401 CAB402 CAB403 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ing major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ing component.) Fundamentals of Data Science Artificial Intelligence Cryptography High Performance and Parallel Computing Programming Paradigms Systems Programming Data and Information | |
| Selected p Computer CAB202 (CAB202 Engineerin Software & Aerospa you will co Engineerin CAB220 CAB320 CAB320 CAB340 CAB401 CAB402 CAB403 CAB403 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ng component.) Fundamentals of Data Science Artificial Intelligence Cryptography High Performance and Parallel Computing Programming Paradigms Systems Programming Data and Information Integration | |

This major option MUST be selected ONLY if you are taking a IT Computer Science major and Engineering Computer & Software Systems Major.

Semesters

- <u>Semester 1 (February)</u>
- commencements Year 1, Semester 1

| | 3, Semester 1 | |
|--|--|--|
| Year 3, Semester 2 | | |
| Year 4, Semester 1 Year 4, Semester 2 | | |
| Year | 5, Semester 1 | |
| | puter Science Major Unit | |
| <u>Optic</u> | <u>ons</u> | |
| Code | Title | |
| Semester | 1 (February) commencements | |
| Year 1, Se | emester 1 | |
| IFB101 | Impact of IT | |
| IFB102 | Computer Technology | |
| IFD102 | Fundamentals | |
| Year 1, Se | emester 2 | |
| IFB130 | Database Management | |
| IFB104 | Building IT Systems | |
| Year 2, Se | emester 1 | |
| IFB103 | Designing for IT | |
| IT Core U | nit Option | |
| Year 2, Se | • | |
| | Science Major Unit Option 1 | |
| - | Science Major Unit Option 2 | |
| | and CAB202 are core to EN01 | |
| | Software Systems Major | |
| Year 3, Se | | |
| CAB203 | | |
| CAB302 | Software Development | |
| Year 3, Se | | |
| CAB303 | Networks | |
| | IT Project Design and | |
| IFB299 | Development | |
| Year 4, Se | · · | |
| CAB301 | Algorithms and Complexity | |
| IFB398 | Capstone Project (Phase 1) | |
| Year 4, Se | | |
| IFB399 | Capstone Project (Phase 2) | |
| | Science Major Unit Option 3 | |
| | 2 (July) commencements | |
| Year 1, Se | | |
| | | |
| IFB101 | Impact of IT | |
| IFB102 | Computer Technology Fundamentals | |
| Year 2, Se | emester 1 | |
| IFB103 | Designing for IT | |
| IFB104 | Building IT Systems | |
| Year 2, Se | emester 2 | |
| IFB130 | Database Management | |
| | | |
| | QU | |
| university | for the real world [®] | |

Year 1, Semester 2 Year 2, Semester 1

Year 2, Semester 2

Year 3, Semester 1

Year 3, Semester 2

Year 4, Semester 1 Year 4, Semester 2

Year 1, Semester 2

Year 2, Semester 1

Year 2, Semester 2

Semester 2 (July) commencements

Civil, Mechanical, Medical or

Process/Chemical Process major -



| Computer | Science Major Unit Option 1 | |
|---|---|--|
| Year 3, Se | emester 1 | |
| CAB203 | Discrete Structures | |
| Computer | Science Major Unit Option 2 | |
| Year 3, Se | emester 2 | |
| CAB303 | Networks | |
| IFB299 | IT Project Design and Development | |
| Year 4, Se | emester 1 | |
| CAB301 | Algorithms and Complexity | |
| CAB302 | Software Development | |
| Year 4, Se | emester 2 | |
| IFB398 | Capstone Project (Phase 1) | |
| IT Core U | nit Option | |
| OR | | |
| Computer | Science Major Unit Option 3 | |
| Year 5, Se | emester 1 | |
| IFB399 | Capstone Project (Phase 2) | |
| Computer | Science Major Unit Option 3 | |
| OR | | |
| IT Core U | nit Option | |
| | Core Unit Option here, if not | |
| selected previously.) | | |
| | | |
| | oreviously.) Science Major Unit Options | |
| Computer As CAB20 | Science Major Unit Options 11 and CAB202 are core to | |
| Computer As CAB20 EN01 Cor | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems | |
| Computer As CAB20 EN01 Con Major, SE | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 | |
| Computer As CAB20 EN01 Con Major, SE undertake | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti and CAB2 | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti and CAB2 CAB310 | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 202. Interaction and Experience Design | |
| Computer As CAB20 EN01 Cor Major, SE undertake Major opti and CAB2 CAB310 CAB320 | Science Major Unit Options 1 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence | |
| Computer As CAB20 EN01 Com Major, SE undertake Major opti and CAB2 CAB310 CAB320 CAB330 | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB330 CAB340 | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and | |
| Computer As CAB20 EN01 Cor Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB330 CAB340 CAB401 | Science Major Unit Options 1 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and Parallel Computing | |
| Computer As CAB20 EN01 Com Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB330 CAB340 CAB401 CAB402 | Science Major Unit Options 1 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and Parallel Computing Programming Paradigms | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB320 CAB330 CAB340 CAB401 CAB402 CAB420 | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and Parallel Computing Programming Paradigms Machine Learning Data and Information | |
| Computer As CAB20 EN01 Cor Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB320 CAB330 CAB340 CAB401 CAB402 CAB420 CAB430 | Science Major Unit Options 1 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and Parallel Computing Programming Paradigms Machine Learning Data and Information Integration | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB320 CAB330 CAB340 CAB401 CAB402 CAB420 CAB420 CAB430 | Science Major Unit Options 1 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and Parallel Computing Programming Paradigms Machine Learning Data and Information Integration Search Engine Technology | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB320 CAB330 CAB340 CAB401 CAB402 CAB402 CAB420 CAB430 CAB431 CAB432 | Science Major Unit Options 1 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and Parallel Computing Programming Paradigms Machine Learning Data and Information Integration Search Engine Technology Cloud Computing Network and Systems | |

Semesters

- Semester 1 (February)
- commencements Year 1, Semester 1 ٠
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2 ٠
- ٠ •
- Year 4, Semester 1 Year 4, Semester 2 •
- Semester 2 (July) commencements •

| Year 1, Semes | ster 2 | |
|---|---|--|
| Year 2, Semester 1 | | |
| Year 2, Semester 2 | | |
| <u>Year 3, Semester 1</u> <u>Year 3, Semester 2</u> | | |
| Year 3, Semester 2 Year 4, Semester 1 | | |
| <u>Year 4, Semester 1</u> <u>Year 4, Semester 2</u> | | |
| Year 5, Semes | ster 1 | |
| | | |
| Code | Title | |
| Semester 1 (Februa | ary) commencements | |
| Year 1, Semester 1 | | |
| IFB101 | Impact of IT | |
| | Computer | |
| IFB102 | Technology | |
| 11 2 102 | Fundamentals | |
| Year 1, Semester 2 | | |
| | | |
| IFB104 | Building IT Systems | |
| IFB130 | Database | |
| | Management | |
| Year 2, Semester 1 | | |
| IFB103 | Designing for IT | |
| IT Core Unit Option | | |
| Year 2, Semester 2 | | |
| | | |
| IAB201 | Modelling Information | |
| IADZU I | Systems | |
| | , | |
| IAB202 | Business of Information | |
| IADZUZ | | |
| | | |
| Voor 2 Somestor 1 | Technology | |
| Year 3, Semester 1 | | |
| Year 3, Semester 1 IAB203 | Business Process | |
| IAB203 | Business Process Modelling | |
| IAB203 IAB204 | Business Process Modelling Business Analysis | |
| IAB203 | Business Process Modelling Business Analysis | |
| IAB203 IAB204 | Business Process Modelling Business Analysis | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 | Business Process Modelling Business Analysis Corporate Systems | |
| IAB203 IAB204 Year 3, Semester 2 | Business Process Modelling Business Analysis | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 | Business Process Modelling Business Analysis Corporate Systems IT Project Design | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 IAB301 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 IAB301 IFB399 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management Enterprise Architecture Capstone Project (Phase 2) | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 IAB301 IFB399 Semester 2 (July) of | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management Enterprise Architecture Capstone Project (Phase 2) | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 IAB304 Year 4, Semester 2 IAB304 Year 4, Semester 2 IAB301 IFB399 Semester 2 (July) of Year 1, Semester 2 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management Enterprise Architecture Capstone Project (Phase 2) Capstone Project | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 IAB301 IFB399 Semester 2 (July) of | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management Enterprise Architecture Capstone Project (Phase 2) | |

| Year 2, Semester 1 | |
|---------------------|--|
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| Year 2, Semester 2 | |
| IFB130 | Database Management |
| IAB201 | Modelling Information Systems |
| Year 3, Semester 1 | |
| IAB202 | Business of Information Technology |
| IT Core Unit Option | |
| Year 3, Semester 2 | |
| IAB204 | Business Analysis |
| IAB205 | Corporate Systems |
| Year 4, Semester 1 | |
| IAB203 | Business Process Modelling |
| IFB299 | IT Project Design and Development |
| Year 4, Semester 2 | |
| IAB301 | Enterprise Architecture |
| IFB398 | Capstone Project (Phase 1) |
| Year 5, Semester 1 | |
| IFB399 | Capstone Project (Phase 2) |
| Select ONE of: | |
| IAB302 | Information Systems Consulting |
| IAB303 | Business Intelligence |
| IAB304 | Project Management |

Semesters

- Semester 1 (February) <u>commencements</u> Year 1 - Semester 1 Year 1 - Semester 2
 Year 2 - Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
 Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1 Year 5 - Semester 2

| Code | Title |
|-------------------------------------|--|
| Semester 1 (February) commencements | |
| Year 1 - Semester 1 | |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |

IFB102

Technology

Fundamentals



| | 3 |
|-----------------|--|
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semest | ter 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | ter 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | ter 2 |
| EGB120 | Foundations of Electrical Engineering |
| Foundation Unit | |
| Year 3 - Semest | ter 1 |
| EGB261 | Unit Operations |
| EGB323 | Fluid Mechanics |
| Year 3 - Semest | ter 2 |
| CVB101 | General Chemistry |
| EGB322 | Thermodynamics |
| Year 4 - Semest | - |
| EGB262 | Process Principles |
| EGB362 | Operations Management and Process Economics |
| Year 4 - Semest | ter 2 |
| EGB364 | Process Modelling |
| EGH411 | Industrial Chemistry |
| Year 5 - Semest | ter 1 |
| EGB361 | Minerals and Minerals Processing |
| EGH400-1 | Research Project 1 |
| EGH404 | Research in Engineering Practice |
| EGH463 | Plant and Process Design |
| Year 5 - Semest | ter 2 |
| EGH400-2 | Research Project 2 |
| EGH422 | Advanced Thermodynamics |
| EGH423 | Fluids Dynamics |
| EGH462 | Process Control |
| Semesters | |

| ٠ | Semester 1 (February) |
|---|-----------------------|
| | commencements |
| ٠ | Year 1 - Semester 1 |
| ٠ | Year 1 - Semester 2 |
| ٠ | Year 2 - Semester 1 |
| • | Year 2 - Semester 2 |

- Year 2 Semester 2
 Year 3 Semester 1
 Year 3 Semester 2
- Year 4, Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title |
|-----------------|--|
| Semester 1 (Feb | oruary) commencements |
| Year 1 - Semest | er 1 |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semest | er 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | er 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | |
| EGB123 | Civil Engineering Systems |
| Foundation Unit | • |
| Year 3 - Semest | |
| EGB270 | Civil Engineering Materials |
| EGB272 | Traffic and Transport Engineering |
| Year 3 - Semest | er 2 |
| EGB273 | Principles of Construction |
| EGB373 | Geotechnical Engineering |
| Year 4, Semeste | er 1 |
| EGB275 | Structural Mechanics |
| EGB371 | Engineering Hydraulics |
| Year 4 - Semest | er 2 |
| EGB376 | Steel Design |
| EGH471 | Advanced Water Engineering |
| Year 5 - Semest | |
| EGB375 | Design of Concrete Structures |
| EGH400-1 | Research Project 1 |
| EGH404 | Research in Engineering Practice |
| EGH473 | Advanced Geotechnical Engineering |
| Year 5 - Semest | er 2 |
| EGH400-2 | Research Project 2 |
| EGH472 | Advanced Highway and Pavement Engineering |
| EGH475 | Advanced Concrete Structures |
| EGH479 | Advances in Civil |

Practice a university for the **real** world



Engineering Practice

Semesters

• Semester 1 (February)

| 0.0.001 | manaamanta | |
|--|---|--|
| <u>commencements</u> <u>Year 1 - Semester 1</u> | | |
| Year 1 - Semester 1 Year 1 - Semester 2 | | |
| Year | <u>2 - Semester 1</u> | |
| • <u>Year</u> | <u>2 - Semester 2</u> | |
| <u>rear</u> Year | <u>3 - Semester 1</u> 3 - Semester 2 | |
| Year | 4 - Semester 1 | |
| • <u>Year</u> | <u>· 4 - Semester 2</u> · 5 - Semester 1 | |
| • <u>Year</u> | <u>: 5 - Semester 1</u> : <u>5 - Semester 2</u> | |
| | | |
| Code | Title | |
| | 1 (February) commencements | |
| Year 1 - S | Semester 1 | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year <u>1 - S</u> | Semester 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - S | Semester 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - S | Semester 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundatio | on Unit Option | |
| Year 3 - S | Semester 1 | |
| 040000 | Microprocessors and Digital | |
| CAB202 | Systems | |
| EGB242 | Signal Analysis | |
| Voor 2 C | | |
| Tear 5 - C | Semester 2 | |
| CAB201 | | |
| CAB201 | | |
| CAB201 Intermedia | Programming Principles | |
| CAB201 Intermedia | Programming Principles ate Electrical Option Unit | |
| CAB201 Intermedia Year 4 - S EGB240 | Programming Principles ate Electrical Option Unit Gemester 1 | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact So | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact So Faculty to | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact So Faculty to units you | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering be provided a list of additional | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact So Faculty to units you | Programming Principles ate Electrical Option Unit Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering be provided a list of additional can select from. | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact So Faculty to units you Year 4 - S CAB403 | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering be provided a list of additional can select from. Semester 2 | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact So Faculty to units you Year 4 - S CAB403 | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit ints with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering be provided a list of additional can select from. Semester 2 Systems Programming ate Electrical or Software | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact Se Faculty to units you Year 4 - S CAB403 Intermedia Option Ur | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit ints with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering be provided a list of additional can select from. Semester 2 Systems Programming ate Electrical or Software | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact Se Faculty to units you Year 4 - S CAB403 Intermedia Option Ur | Programming Principles ate Electrical Option Unit Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering be provided a list of additional can select from. Semester 2 Systems Programming ate Electrical or Software nit | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE60&courseID=32942. CRICOS No.00213J

| EGH400 -1 | Research Project 1 | |
|--|-------------------------|--|
| Advanced Electrical or Software Option Unit | | |
| EGH456 | Embedded Systems | |
| Year 5 - Semester 2 | | |
| EGH400 -2 | Research Project 2 | |
| EGH455 | Advanced Systems Design | |
| Advanced Electrical Option Unit | | |
| Advanced Software Option Unit | | |

Semesters

- Semester 1 (February) commencements
- ٠ Year 1 - Semester 1
- •
- Year 1 Semester 2 Year 2 Semester 1 .
- Year 2 Semester 2 •
- Year 3 Semester 1 ٠
- •
- Year 3 Semester 2 Year 4 Semester 1 •
- Year 4 Semester 2 •
- Year 5 - Semester 1
- Year 5 - Semester 2

| Code | Title | |
|---|--|--|
| Semester 1 (February) commencements | | |
| Year 1 - Seme | ester 1 | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Seme | ester 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Seme | ester 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Seme | ester 2 | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB120 | Foundations of Electrical Engineering | |
| Year 3 - Seme | ester 1 | |
| EGB240 | Electronic Design | |
| EGB241 | Electromagnetics and Machines | |
| Year 3 - Semester 2 | | |
| EGB242 | Signal Analysis | |
| Intermediate E | Electrical Option Unit (1) | |
| EGB348 can be selected from the list. A requisite waiver for this unit will be granted if you are enrolled in EGB242 at the same time . | | |

| Year 4 - Seme EGB340 | Design and Practice | |
|---|-------------------------------------|--|
| Foundation Unit Option | | |
| Year 4 - Seme | ester 2 | |
| Intermediate Electrical Option Unit (2) | | |
| Intermediate Electrical Option Unit (3) | | |
| Year 5 - Seme | ester 1 | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| Advanced Ele | ctrical Option Unit (1) | |
| Advanced Electrical Option Unit (2) | | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| Advanced Electrical Option Unit (3) | | |
| Advanced Electrical Option Unit (4) | | |
| Advanced Electrical Option Unit (5) | | |
| | <u>r 1 (February)</u> cements | |

- <u>commencements</u>
 <u>Year 1 Semester 1</u>
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2 Year 3 Semester 1 ٠
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2 •
- Year 5 Semester 1 .
- Year 5 Semester 2

| Code | Title | |
|------------------------|--|--|
| Semester 1 (Feb | oruary) commencements | |
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | er 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semester 2 | | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit Option | | |
| Year 3 - Semester 1 | | |
| CAB202 | Microprocessors and Digital Systems | |

| EGB240 | Electronic Design | |
|-------------------------------------|---|--|
| Year 3 - Semest | ter 2 | |
| EGB242 | Signal Analysis | |
| Intermediate Electrical Option Unit | | |
| Year 4 - Semester 1 | | |
| EGB243 | Aircraft Systems and Flight | |
| EGB349 | Systems Engineering and Design Project | |
| Year 4 - Semest | ter 2 | |
| EGB345 | Control and Dynamic Systems | |
| EGB346 | Unmanned Aircraft Systems | |
| Year 5 - Semest | ter 1 | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH446 | Autonomous Systems | |
| Advanced Electrical Option Unit | | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH445 | Modern Control | |
| EGH450 | Advanced Unmanned Aircraft Systems | |
| Advanced Electrical Option Unit | | |

Semesters

- Semester 1 (February)
- <u>commencements</u>
- Year 1 Semester 1
 Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2 •
- Year 3 Semester 1 Year 3 Semester 2 •
- Year 4 Semester 1 • •
- Year 4 Semester 2
- Year 5 Semester 1 . .
- Year 5 Semester 2

| Code | Title | |
|-------------------------------------|--|--|
| Semester 1 (February) commencements | | |
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semester 1 | | |
| EGB111 | Foundation of | |
| | | |



| | 8 8 (| |
|------------------------|--|--|
| | Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | er 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit Option | | |
| Year 3 - Semest | er 1 | |
| EGB210 | Fundamentals of Mechanical Design | |
| EGB214 | Materials and Manufacturing | |
| Year 3 - Semest | er 2 | |
| EGB211 | Dynamics | |
| EGB314 | Strength of Materials | |
| Year 4 - Semest | er 1 | |
| EGB321 | Dynamics of Machines | |
| EGB323 | Fluid Mechanics | |
| Year 4 - Semest | er 2 | |
| EGB322 | Thermodynamics | |
| EGH404 | Research in Engineering Practice | |
| Year 5 - Semest | er 1 | |
| EGB316 | Design of Machine Elements | |
| EGH400-1 | Research Project 1 | |
| EGH414 | Stress Analysis | |
| EGH421 | Vibration and Control | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH420 | Mechanical Systems Design | |
| EGH422 | Advanced Thermodynamics | |
| | | |

Semesters

- Semester 1 (February)
- commencements
- Year 1 - Semester 1 Year 1 - Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- ٠ Year 3 - Semester 1
- Year 3 Semester 2 ٠
- Year 4 Semester 1 ٠
- Year 4 Semester 2 ٠
- Year 5 Semester 1 Year 5 Semester 2 • •

| Code | Title |
|-------------------------------------|--|
| Semester 1 (February) commencements | |
| Year 1 - Semester 1 | |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational |

| | Explorations | |
|---------------------------------|--|--|
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | er 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | er 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit | Option | |
| Year 3 - Semest | er 1 | |
| EGB211 | Dynamics | |
| EGB242 | Signal Analysis | |
| Year 3 - Semest | er 2 | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB345 | Control and Dynamic Systems | |
| Year 4 - Semester 1 | | |
| EGB220 | Mechatronics Design 1 | |
| EGB321 | Dynamics of Machines | |
| Year 4 - Semest | er 2 | |
| EGB320 | Mechatronics Design 2 | |
| Intermediate Ele | ctrical Option Unit | |
| Year 5 - Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH419 | Mechatronics Design 3 | |
| EGH446 | Autonomous Systems | |
| Year 5 - Semest | er 2 | |
| EGH400-2 | Research Project 2 | |
| EGH413 | Advanced Dynamics | |
| EGH445 | Modern Control | |
| Advanced Electrical Option Unit | | |

Semesters

- <u>Semester 1 (February)</u>
- <u>commencements</u>
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 Year 2 - Semester 2
- Year 3 - Semester 1
- Year 3 Semester 2 ٠
- Year 4 - Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
 Year 5 Semester 2

| Code | Title |
|---------------------|-----------------------|
| Semester 1 (Feb | oruary) commencements |
| Year 1 - Semester 1 | |
| EGB113 | Energy in Engineering |

| | Systems | |
|--|---|--|
| | Introductory | |
| MZB125 | Engineering Mathematics | |
| OR | Mathomatioo | |
| | Computational | |
| MXB161 | Explorations | |
| Year 1 - Semest | | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | er 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | er 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit | Option | |
| Year 3 - Semest | er 1 | |
| EGB210 | Fundamentals of Mechanical Design | |
| LSB131 | Anatomy | |
| Year 3 - Semester 2 | | |
| EGB211 | Dynamics | |
| LSB231 | Physiology | |
| Year 4 - Semester 1 | | |
| EGB214 | Materials and Manufacturing | |
| EGB323 | | |
| | Fluid Mechanics | |
| Year 4 - Semest | | |
| Year 4 - Semest EGB314 | | |
| | er 2 | |
| EGB314 | er 2 Strength of Materials Research in Engineering Practice | |
| EGB314 EGH404 | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign | |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 | |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 EGH414 | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 Stress Analysis | |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 EGH414 EGH418 | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 Stress Analysis Biomechanics | |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 EGH414 EGH418 Year 5 - Semest | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 Stress Analysis Biomechanics er 2 | |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 EGH414 EGH418 Year 5 - Semest EGH400-2 | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 Stress Analysis Biomechanics er 2 Research Project 2 | |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 EGH414 EGH418 Year 5 - Semest | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 Stress Analysis Biomechanics er 2 Research Project 2 Biofluids | |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 EGH414 EGH418 Year 5 - Semest EGH400-2 | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 Stress Analysis Biomechanics er 2 Research Project 2 | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE60&courseID=32942. CRICOS No.00213J

QUI

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | SE70 |
| CRICOS | 092653A |
| Duration (full-time) | 4 years |
| OP | 7 |
| Rank | 86 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$10,200 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,200 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Ross Brown (Games and Interactive Environments); Associate Professor Tim Moroney (Mathematics); email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | TBA (Applied and Computational Mathematics); Associate Professor Paul Corry (Decision Science); and Associate Professor Chris Drovandi (Statistical Science). |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Games and Interactive Environment program and 192 credit points from the Bachelor of Mathematics program.

Games and Interactive

Environments component:

- 6 units (72 credit points) of games and interactive environments core units, which includes 2 units (24 credit points) of option units* selected from an approved list.
- 10 units (120 credit points) of Major core units

Mathematics component:

- 6 core units (72 credit points), which are further divided into 4 mathematics core units (48 credit points), and 2 core option units* (24 credit points) selected from an approved list.
- 10 major core units (120 credit points).

* Unit options list - comprises a wide

variety of foundation units from a range of disciplines offered at QUT. In the Mathematics component, there is an opportunity to choose additional mathematics units, which includes a unit specially designed to assist students without a background of successful study in Mathematics C at high school; an alternative unit aimed at high achieving students that explores some interesting and unusual aspects of mathematics in some detail; and a unit introducing the field of computational and simulation science which combines mathematics, science and computing to simulate realworld problems. The core option choices can be used to complement your Major studies.

International Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Games and Interactive Environment program and 192 credit points from the Bachelor of Mathematics program.

Games and Interactive

Environments component:

- 6 units (72 credit points) of games and interactive environments core units, which includes 2 units (24 credit points) of option units* selected from an approved list.
- 10 units (120 credit points) of Major core units

Mathematics component:

- 6 core units (72 credit points), which are further divided into 4 mathematics core units (48 credit points), and 2 core option units* (24 credit points) selected from an approved list.
- 10 major core units (120 credit points).

* Unit options list - comprises a wide variety of foundation units from a range of disciplines offered at QUT. In the Mathematics component, there is an opportunity to choose additional mathematics units, which includes a unit specially designed to assist students without a background of successful study in Mathematics C at high school; an alternative unit aimed at high achieving students that explores some interesting and unusual aspects of mathematics in some detail; and a unit introducing the field of computational and simulation science which combines mathematics, science and computing to simulate realworld problems. The core option choices



Bachelor of Games and Interactive Environments/Bachelor of Mathematics

can be used to complement your Major studies.

Sample Structure **Semesters**

- Year 1, Semester 1
- Year 1, Semester 2 •
- Year 2, Semester 1 •
- Year 2, Semester 2 Year 3, Semester 1 ٠
- ٠ Year 3, Semester 2
- ٠
- Year 4, Semester 1 Year 4, Semester 2 .

| Code | Title | |
|--------------------|---|--|
| Year 1, Semester 1 | | |
| IGB180 | Computer Games Studies | |
| IGB181 | Game Production and Technology | |
| Year 1, Semester | 2 | |
| IFB103 | Designing for IT | |
| IFB104 | Building IT Systems | |
| Year 2, Semester | 1 | |
| IGB100 | Game Studio 1: Mini- Game Development | |
| BGIE Core Unit O | ption | |
| Year 2, Semester | 2 | |
| KNB127 | CGI Foundations | |
| KNB135 | Animation Aesthetics | |
| Year 3, Semester | 1 | |
| KNB137 | Digital Worlds | |
| BGIE Core Unit O | ption | |
| Year 3, Semester | 2 | |
| IGB200 | Game Studio 2: Applied Game Development | |
| KNB227 | CGI Technologies | |
| Year 4, Semester | 1 | |
| IGB300 | Capstone Project (Game Design) | |
| KNB217 | Digital Creatures | |
| Year 4, Semester | 2 | |
| IGB301 | Capstone Project (Game Development) | |
| IGB400 | Game Studio 3: Game Innovation | |

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
 Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2 Year 4, Semester 1 ٠
- ٠ Year 4. Semester 2 .

| i oui | 1, 00111 | |
|-------|----------|--|
| | | |
| | | |
| | | |
| | | |

| Code | litte |
|------------------|-------|
| Year 1, Semester | 1 |

| IGB180 | Computer Games Studies | |
|--------------------|---|--|
| IGB181 | Game Production and Technology | |
| Year 1, Semester | 2 | |
| IFB103 | Designing for IT | |
| IFB104 | Building IT Systems | |
| Year 2, Semester | 1 | |
| IGB100 | Game Studio 1: Mini- Game Development | |
| BGIE Core Unit C | ption | |
| Year 2, Semester | 2 | |
| IGB220 | Fundamentals of Game Design | |
| DXB304 | Interactive Narrative Design | |
| Year 3, Semester 1 | | |
| DXB303 | Programming for Visual Designers | |
| BGIE Core Unit C | ption | |
| Year 3, Semester | 2 | |
| IGB200 | Game Studio 2: Applied Game Development | |
| IGB321 | Immersive Game Level Design | |
| Year 4, Semester | 1 | |
| IGB320 | Game Design in Different Contexts | |
| IGB300 | Capstone Project (Game Design) | |
| Year 4, Semester | 2 | |
| IGB301 | Capstone Project (Game Development) | |
| IGB400 | Game Studio 3: Game Innovation | |

Semesters

- Year 1, Semester 1
 Year 1, Semester 2
 Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
 Year 4, Semester 1
- Year 4, Semester 2

| Code | Title | |
|--------------------|--|--|
| Year 1, Semester 1 | | |
| IGB180 | Computer Games Studies | |
| IGB181 | Game Production and Technology | |
| Year 1, Semester 2 | | |
| IFB103 | Designing for IT | |
| IFB104 | Building IT Systems | |
| Year 2, Semester 1 | | |
| IGB100 | Game Studio 1: Mini- Game Development | |

| BGIE Core Unit Option | | |
|-----------------------|---|--|
| Year 2, Semester 2 | | |
| CAB201 | Programming Principles | |
| IGB283 | Game Engine Theory and Application | |
| Year 3, Semester | 1 | |
| CAB301 | Algorithms and Complexity | |
| BGIE Core Unit O | ption | |
| Year 3, Semester | 2 | |
| IGB200 | Game Studio 2: Applied Game Development | |
| IGB381 | Game Engine Technology | |
| Year 4, Semester 1 | | |
| IGB383 | AI for Games | |
| IGB300 | Capstone Project (Game Design) | |
| Year 4, Semester 2 | | |
| IGB301 | Capstone Project (Game Development) | |
| IGB400 | Game Studio 3: Game Innovation | |

Semesters

- Applied and Computational
- Mathematics Major unit set:
- Year 1 Semester 1 Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- <u>NOTE:</u>

| HOTE. | | |
|--|--|--|
| Code | Title | |
| Applied and Computational Mathematics Major unit set: | | |
| Year 1 Sem | ester 1 | |
| MXB102 | Abstract Mathematical Reasoning | |
| Maths Core | Options Unit** | |
| OR | | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| OR | | |
| MXB103 | Introductory Computational Mathematics | |
| Year 1 Semester 2 | | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| (PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and | | |



Bachelor of Games and Interactive Environments/Bachelor of Mathematics

| MXB106. These units are common to all three Maths majors) | | |
|---|--|--|
| Year 2 Sem | ester 1 | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| | Core Options Unit** (select if MXB101 in first year) | |
| MXB103 | Introductory Computational Mathematics | |
| OR Maths Core Options Unit** (select if completed MXB103 in first year) | | |
| Year 2 Sem | ester 2 | |
| MXB107 | Introduction to Statistical Modelling | |
| Maths Core | Options Unit** | |
| Year 3 Sem | ester 1 | |
| MXB201 | Advanced Linear Algebra | |
| MXB221 | Ordinary Differential Equations | |
| Year 3 Sem | ester 2 | |
| MXB202 | Advanced Calculus | |
| MXB222 | Computational Linear Algebra | |
| Year 4 Sem | ester 1 | |
| MXB321 | Applied Transport Theory | |
| MXB322 | Partial Differential Equations | |
| Year 4 Semester 2 | | |
| MXB323 | Dynamical Systems | |
| MXB324 | Computational Fluid Dynamics | |
| NOTE: | | |

** Only TWO (2) Option units may be taken in these 4 unit-slots.

Semesters

- Decision Science Major unit set:
- Year 1 Semester 1
- Year 1 Semester 2
 Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1 ٠
- Year 3 Semester 2 Year 4 Semester 1 ٠
- Year 4 Semester 2
- NOTE:
- Code Title

| Decision Science Major unit set: | | |
|--|---|--|
| Year 1 Semester 1 | | |
| MXB102 Abstract Mathematical Reasoning | | |
| Maths Core Options Unit** | | |
| OR | | |
| MXB101 Probability and Stochastic Modelling 1 | | |
| OR | | |
| MXB103 | Introductory Computational Mathematics | |

| Year 1 Sem | ester 2 | |
|--|--|--|
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| (PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors) | | |
| Year 2 Sem | | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| | Core Options Unit** (select if //XB101 in first year) | |
| MXB103 | Introductory Computational Mathematics | |
| OR Maths Core Options Unit** (select if completed MXB103 in first year) | | |
| Year 2 Sem | ester 2 | |
| MXB107 | Introduction to Statistical Modelling | |
| Maths Core | Options Unit | |
| Year 3 Sem | ester 1 | |
| MXB201 | Advanced Linear Algebra | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| OR | | |
| CAB201 | Programming Principles | |
| Year 3 Sem | ester 2 | |
| MXB202 | Advanced Calculus | |
| MXB232 | Introduction to Operations Research | |
| Year 4 Sem | ester 1 | |
| MXB332 | Optimisation Modelling | |
| MXB341 | Statistical Inference | |
| OR | | |
| MXB351 | Coding Theory and Graph Theory | |
| Year 4 Sem | ester 2 | |
| MXB334 | Operations Research for Stochastic Processes | |
| MXB335 | Advanced Optimisation Modelling | |
| NOTE: | | |
| | | |

taken in these 4 unit-slots.

Semesters

- Statistical Science Major unit set:
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- NOTE:

| \$ | |
|----------------|--|
| Code | Title |
| Statistical So | cience Major unit set: |
| Year 1 Sem | ester 1 |
| MXB102 | Abstract Mathematical Reasoning |
| Maths Core | Options Unit** |
| OR | - |
| MXB101 | Probability and Stochastic Modelling 1 |
| OR | |
| MXB103 | Introductory Computational Mathematics |
| Year 1 Sem | ester 2 |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| | OTE: you will need to |
| | ur Maths major in your |
| | o select MXB105 and lese units are common to all |
| three Maths | |
| Year 2 Sem | • • |
| MXB101 | Probability and Stochastic |
| | Modelling 1 |
| | ore Options Unit** (select if IXB101 in first year) |
| MXB103 | Introductory Computational Mathematics |
| | ore Options Unit** (select if |
| | 1XB103 in first year) |
| Year 2 Sem | |
| MXB107 | Introduction to Statistical Modelling |
| | Options Unit** |
| Year 3 Sem | ester 1 |
| MXB201 | Advanced Linear Algebra |
| MXB242 | Regression and Design |
| Year 3 Sem | ester 2 |
| MXB202 | Advanced Calculus |
| MXB241 | Probability and Stochastic Modelling 2 |
| Year 4 Sem | ester 1 |
| MXB341 | Statistical Inference |
| MXB342 | Statistical Techniques |
| Year 4 Sem | ester 2 |
| MXB343 | Modelling Dependent Data |
| MXB344 | Generalised Linear Models |
| NOTE: | |

** Only TWO (2) Option units may be taken in these 4 unit-slots.

Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | SE80 |
| CRICOS | 084924E |
| Duration (full-time) | 5 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,200 per year full-time (96 credit points) |
| Total credit points | 480 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - (Engineering); Dr Graham Johnson (Science); email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Thomas Rainey (Chemical Process), Dr Brian Lee (Civil); Dr Wayne Kelly (Computer & Software Systems); Dr Jacob Coetzee (Electrical); Dr Aaron Mcfadyen (Electrical & Aerospace); Professor Ted Steinberg (Mechanical); Ass. Professor Jason Ford (Mechatronics); Dr Devakar Epari (Medical); Dr Marion Bateson (Biological Science); Dr James Blinco (Chemistry); Dr Luke Nothdurft (Earth Science); Dr Andrew Baker (Environmental Science); and Prof Nunzio Motto (Physics) |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours) in SE80, students are required to complete 288 credit points of course units, as outlined below:

- First year: four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course structure

To graduate with a Bachelor of Engineering (Honours) in SE80, students are required to complete 288 credit points of course units, as outlined below:

- First year: four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

Sample Structure

- Semester 1 (February)
- commencements
- Year 1 Semester 1
 Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Semester 2 (July) commencements
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Year 5, Semester 1

| Code | Title | |
|--------------------------|--|--|
| Semester 1 (Feb | ruary) commencements | |
| Year 1 Semester | 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 1 Semester | 2 | |
| Science Core Unit Option | | |
| Science Major Ur | nit Option | |
| Year 2 Semester | 1 | |
| SEB115 | Experimental Science | |
| SEB116 | Experimental Science 2 | |
| Year 2 Semester | 2 | |
| BVB101 | Foundations of Biology | |
| BVB102 | Evolution | |
| Year 3 Semester 1 | | |
| BVB202 | Experimental Design and Quantitative Methods | |
| BVB301 | Animal Biology | |
| Year 3 Semester 2 | | |



| BVB201 | Biological Processes |
|---------------------------|--|
| BVB204 | Ecology |
| Year 4 Semester | ÷. |
| BVB203 | Plant Biology |
| BVB305 | Microbiology and the Environment |
| Year 4 Semester | 2 |
| BVB304 | Integrative Biology |
| BVB313 | Population Genetics and Molecular Ecology |
| Semester 2 (July |) commencements |
| Year 1, Semeste | r 2 |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| Year 2, Semeste | r 1 |
| SEB115 | Experimental Science 1 |
| SEB116 | Experimental Science 2 |
| Year 2, Semeste | r 2 |
| BVB101 | Foundations of Biology |
| BVB102 | Evolution |
| Year 3, Semeste | r 1 |
| BVB202 | Experimental Design and Quantitative Methods |
| BVB301 | Animal Biology |
| Year 3, Semeste | r 2 |
| BVB201 | Biological Processes |
| BVB204 | Ecology |
| Year 4, Semeste | r 1 |
| BVB203 | Plant Biology |
| BVB305 | Microbiology and the Environment |
| Year 4, Semeste | r 2 |
| BVB304 | Integrative Biology |
| BVB313 | Population Genetics and Molecular Ecology |
| Year 5, Semeste | r 1 |
| Science Core Unit Option | |
| Science Major Unit Option | |
| | |

Semesters

- Semester 1 (February) commencements
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 Year 2 Semester 2 ٠
- Year 3 Semester 1 •
- Year 3 Semester 2

- Year 4 Semester 1 Year 4 Semester 2 Semester 2 (July) commencements ٠
- Year 1, Semester 2 Year 2, Semester 1 ٠
- Year 2, Semester 2 •
- Year 3, Semester 1
- Year 3, Semester 2 Year 4, Semester 1 • ٠
- Year 4, Semester 2
- Year 5, Semester 1

| Code | Title |
|-------------------|---|
| Semester 1 (Febr | uary) commencements |
| Year 1 Semester | 1 |
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 1 Semester 2 | 2 |
| CVB101 | General Chemistry |
| CVB102 | Chemical Structure and Reactivity |
| Year 2 Semester | 1 |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| Year 2 Semester 2 | 2 |
| CVB210 | Chemical Measurement Science |
| Science Core Unit | t Option |
| Year 3 Semester | 1 |
| CVB201 | Inorganic Chemistry |
| CVB202 | Analytical Chemistry |
| Year 3 Semester 2 | 2 |
| CVB203 | Physical Chemistry |
| CVB204 | Organic Structure and Mechanisms |
| Year 4 Semester | 1 |
| CVB301 | Organic Chemistry: Strategies for Synthesis |
| CVB302 | Applied Physical Chemistry |
| Year 4 Semester 2 | 2 |
| CVB303 | Coordination Chemistry |
| CVB304 | Chemistry Research Project |
| Semester 2 (July) | commencements |
| Year 1, Semester | 2 |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| Year 2, Semester | 1 |
| SEB115 | Experimental Science 1 |

| SEB116 | Experimental Science 2 | |
|--------------------------|---|--|
| Year 2, Semester | 2 | |
| CVB101 | General Chemistry | |
| CVB102 | Chemical Structure and Reactivity | |
| Year 3, Semester | 1 | |
| CVB201 | Inorganic Chemistry | |
| CVB202 | Analytical Chemistry | |
| Year 3, Semester | 2 | |
| CVB203 | Physical Chemistry | |
| CVB204 | Organic Structure and Mechanisms | |
| Year 4, Semester | 1 | |
| CVB301 | Organic Chemistry: Strategies for Synthesis | |
| CVB302 | Applied Physical Chemistry | |
| Year 4, Semester | 2 | |
| CVB210 | Chemical Measurement Science | |
| CVB303 | Coordination Chemistry | |
| Year 5, Semester | 1 | |
| CVB304 | Chemistry Research Project | |
| Science Core Unit Option | | |

Semesters

- <u>Semester 1 (February)</u> <u>commencements</u>
- Year 1 Semester 1
- Year 1 Semester 2 Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2 • Year 4 Semester 1
- Year 4 Semester 2
- Semester 2 (July) commencements
- Year 1, Semester 2
- •
- Year 2, Semester 1 Year 2, Semester 2 •
- Year 3, Semester 1 •
- Year 3, Semester 2 •
- Year 4, Semester 1 Year 4, Semester 2
- ٠
- Year 5, Semester 1 •

| Code | Title | |
|-------------------------------------|---------------------------------|--|
| Semester 1 (February) commencements | | |
| Year 1 Semester 1 | | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 1 Semester 2 | | |
| Science Core Unit Option | | |
| Science Major Unit Option | | |



This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE80&courseID=32944. CRICOS No.00213J

Science Major Unit Option

| Year 2 Semeste | er 1 | |
|----------------------------------|---|--|
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 2 Semeste | er 2 | |
| ERB101 | Earth Systems | |
| ERB102 | Evolving Earth | |
| Year 3 Semeste | er 1 | |
| ERB201 | Destructive Earth: Natural Hazards | |
| ERB202 | Marine Geoscience | |
| Year 3 Semeste | | |
| ERB203 | Sedimentary Geology and Stratigraphy | |
| ERB204 | Deforming Earth: Fundamentals of Structural Geology | |
| Year 4 Semeste | er 1 | |
| ERB301 | Chemical Earth | |
| ERB302 | Applied Geophysics | |
| Year 4 Semeste | er 2 | |
| ERB303 | Energy Resources and Basin Analysis | |
| ERB304 | Dynamic Earth: Plate Tectonics | |
| Semester 2 (Jul | y) commencements | |
| Year 1, Semest | er 2 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 2, Semest | er 1 | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 2, Semest | er 2 | |
| ERB101 | Earth Systems | |
| ERB102 | Evolving Earth | |
| Year 3, Semest | er 1 | |
| ERB201 | Destructive Earth: Natural Hazards | |
| ERB202 | Marine Geoscience | |
| Year 3, Semest | er 2 | |
| ERB203 | Sedimentary Geology and Stratigraphy | |
| ERB204 | Deforming Earth: Fundamentals of Structural Geology | |
| Year 4, Semest | ÷. | |
| ERB301 | Chemical Earth | |
| ERB302 | Applied Geophysics | |
| Year 4, Semest | | |
| ERB303 | Energy Resources and Basin Analysis | |
| ERB304 | Dynamic Earth: Plate Tectonics | |
| Year 5, Semest Science Core U | | |
| | | |

| Year 1, Sem Year 2, Sem Year 2, Sem Year 3, Sem Year 3, Sem Year 4, Sem Year 4, Sem Year 5, Sem | nents ester 1 ester 2 ester 1 ester 2 ester 1 ester 2 ester 1 ester 2 (July) commencements nester 2 nester 1 nester 1 ne |
|--|---|
| Code | |
| Semester 1 (Febr Year 1 Semester | uary) commencements |
| | Grand Challenges in |
| SEB104 | Science |
| SEB113 | Quantitative Methods in Science |
| Year 1 Semester | |
| Science Core Un | - |
| Science Major Ur | - |
| Year 2 Semester | |
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 2 Semester | |
| ERB101 | Earth Systems |
| EVB102 | Ecosystems and the Environment |
| Year 3 Semester | |
| BVB202 | Experimental Design and Quantitative Methods |
| EVB203 | Geospatial Information Science |
| Year 3 Semester | 2 |
| BVB204 | Ecology |
| EVB302 | Environmental Pollution |
| Year 4 Semester | |
| BVB311 | Conservation Biology |
| EVB312 | Soils and the Environment |
| Year 4 Semester | |
| ERB310 EVB304 | Groundwater Systems Case Studies in Environmental Science |

| Semester 2 (July) | commencements |
|-------------------|--|
| Year 1, Semester | |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| Year 2, Semester | ·1 |
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 2, Semester | 2 |
| ERB101 | Earth Systems |
| EVB102 | Ecosystems and the Environment |
| Year 3, Semester | 1 |
| BVB202 | Experimental Design and Quantitative Methods |
| EVB203 | Geospatial Information Science |
| Year 3, Semester | 2 |
| BVB204 | Ecology |
| EVB302 | Environmental Pollution |
| Year 4, Semester | ·1 |
| BVB311 | Conservation Biology |
| EVB312 | Soils and the Environment |
| Year 4, Semester | 2 |
| ERB310 | Groundwater Systems |
| EVB304 | Case Studies in Environmental Science |
| Year 5, Semester | 1 |
| Science Core Uni | t Option |
| Science Major Ur | nit Option |

Semesters

- Semester 1 (February) commencements
- Year 1 Semester 1
- Year 1 Semester 2
 Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Semester 2 (July) commencements

QUI

- Year 1, Semester 2
- Year 2, Semester 1
 Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2
- •
- Year 4, Semester 1 Year 4, Semester 2 •
- Year 5, Semester 1

| Code | Title |
|------------------|--|
| | uary) commencements |
| Year 1 Semester | |
| SEB113 | Quantitative Methods in Science |
| SEB115 | Experimental Science |
| Year 1 Semester | 2 |
| PVB102 | Physics of the Very Small |
| SEB104 | Grand Challenges in Science |
| Year 2 Semester | 1 |
| PVB210 | Stellar Astrophysics |
| SEB116 | Experimental Science 2 |
| Year 2 Semester | 2 |
| PVB220 | Cosmology |
| Science Core Uni | • |
| Year 3 Semester | |
| PQB360 | Global Energy Balance and Climate Change |
| PVB203 | Experimental Physics |
| Year 3 Semester | 2 |
| PVB202 | Mathematical Methods in Physics |
| PVB204 | Electromagnetism |
| Year 4 Semester | 1 |
| PVB301 | Materials and Thermal Physics |
| PVB302 | Classical and Quantum Physics |
| Year 4 Semester | 2 |
| PVB303 | Nuclear and Particle Physics |
| PVB304 | Physics Research |
| | commencements |
| Year 1, Semester | |
| PVB102 | Physics of the Very Small |
| SEB104 | Grand Challenges in Science |
| Year 2, Semester | |
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 2, Semester | 2 |
| PVB202 | Mathematical Methods in Physics |
| SEB113 | Quantitative Methods in Science |
| Year 3, Semester | 1 |
| PVB203 | Experimental Physics |
| PVB210 | Stellar Astrophysics |

| Year 3, Semester | 2 |
|-------------------|--|
| PVB204 | Electromagnetism |
| PVB220 | Cosmology |
| Year 4, Semester | 1 |
| PVB301 | Materials and Thermal Physics |
| PVB302 | Classical and Quantum Physics |
| Year 4, Semester | 2 |
| PVB303 | Nuclear and Particle Physics |
| PVB304 | Physics Research |
| Year 5, Semester | 1 |
| PQB360 | Global Energy Balance and Climate Change |
| Science Core Unit | t Option |

Semesters

- Semester 1 (February) commencements Year 1 - Semester 1 Year 1 - Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
 Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title |
|-----------------|--|
| Semester 1 (Feb | oruary) commencements |
| Year 1 - Semest | er 1 |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semest | er 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | er 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | er 2 |
| EGB120 | Foundations of Electrical Engineering |
| Foundation Unit | Option |
| Year 3 - Semest | er 1 |
| EGB261 | Unit Operations |
| EGB323 | Fluid Mechanics |

| Year 3 - Semester 2CVB101General ChemistryEGB322ThermodynamicsYear 4 - Semester 1EGB262Process PrinciplesEGB362Operations Management and Process EconomicsYear 4 - Semester 2EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH400-3Flant and Process DesignEGH402Process Control | | |
|---|-----------------|-------------------------------------|
| EGB322ThermodynamicsYear 4 - Semester 1EGB262Process PrinciplesEGB362Operations Management and Process EconomicsYear 4 - Semester 2EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH400-3Flant and Process DesignEGH422Advanced ThermodynamicsEGH423Fluids Dynamics | | |
| Year 4 - Semester 1EGB262Process PrinciplesEGB362Operations Management and Process EconomicsYear 4 - Semester 2EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH400-3Fleat and Process DesignEGH422Advanced ThermodynamicsEGH423Fluids Dynamics | CVB101 | General Chemistry |
| EGB262Process PrinciplesEGB362Operations Management and Process EconomicsYear 4 - Semester 2EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH400-3Fleat and Process DesignEGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGB322 | Thermodynamics |
| EGB362Operations Management and Process EconomicsYear 4 - Semester 2EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH400-3Fleat and Process DesignEGH422Advanced ThermodynamicsEGH423Fluids Dynamics | Year 4 - Semest | ter 1 |
| EGB362Management and Process EconomicsYear 4 - Semester 2EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH400-3Research Project 2EGH400-4Research Project 2EGH400-5Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGB262 | Process Principles |
| EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | | Management and Process Economics |
| EGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced | Year 4 - Semest | ter 2 |
| Year 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGB364 | Process Modelling |
| EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGH411 | Industrial Chemistry |
| EGB361ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | Year 5 - Semest | ter 1 |
| EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGB361 | |
| EGH404Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGH400-1 | Research Project 1 |
| EGH463DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGH404 | |
| EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGH463 | |
| EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | Year 5 - Semest | ter 2 |
| EGH422ThermodynamicsEGH423Fluids Dynamics | EGH400-2 | Research Project 2 |
| | EGH422 | |
| EGH462 Process Control | EGH423 | Fluids Dynamics |
| | EGH462 | Process Control |

Semesters

| Semester 1 (February |) |
|--|---|
|--|---|

- commencements
- Year 1 Semester 1 •
- Year 1 Semester 2 Year 2 - Semester 1
- Year 2 Semester 2
- Year 3 Semester 1 ٠
- Year 3 Semester 2
- ٠
- Year 4, Semester 1 •
- Year 4 Semester 2 Year 5 Semester 1 ٠
- Year 5 Semester 2

| Code | Title |
|-----------------|--|
| Semester 1 (Feb | oruary) commencements |
| Year 1 - Semest | er 1 |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semest | er 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | er 1 |
| EGB111 | Foundation of Engineering Design |

QUI

| EGB121 | Engineering Mechanics |
|-----------------|---|
| Year 2 - Semest | ter 2 |
| EGB123 | Civil Engineering Systems |
| Foundation Unit | Option |
| Year 3 - Semest | ter 1 |
| EGB270 | Civil Engineering Materials |
| EGB272 | Traffic and Transport Engineering |
| Year 3 - Semest | ter 2 |
| EGB273 | Principles of Construction |
| EGB373 | Geotechnical Engineering |
| Year 4, Semeste | er 1 |
| EGB275 | Structural Mechanics |
| EGB371 | Engineering Hydraulics |
| Year 4 - Semest | ter 2 |
| EGB376 | Steel Design |
| EGH471 | Advanced Water Engineering |
| Year 5 - Semest | ter 1 |
| EGB375 | Design of Concrete Structures |
| EGH400-1 | Research Project 1 |
| EGH404 | Research in Engineering Practice |
| EGH473 | Advanced Geotechnical Engineering |
| Year 5 - Semest | ter 2 |
| EGH400-2 | Research Project 2 |
| EGH472 | Advanced Highway and Pavement Engineering |
| EGH475 | Advanced Concrete Structures |
| EGH479 | Advances in Civil Engineering Practice |

Semesters

- Semester 1 (February) commencements
- Year 1 Semester 1
 Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
 Year 5 Semester 2

| Code | Title |
|-----------------|----------------------------------|
| Semester 1 (Feb | oruary) commencements |
| Year 1 - Semest | er 1 |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering |

| | Mathematics |
|---------------------------------|--|
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semest | er 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | er 2 |
| EGB120 | Foundations of Electrical Engineering |
| Foundation Unit | Option |
| Year 3 - Semest | er 1 |
| CAB202 | Microprocessors and Digital Systems |
| EGB242 | Signal Analysis |
| Year 3 - Semest | er 2 |
| CAB201 | Programming Principles |
| Intermediate Ele | ctrical Option Unit |
| Year 4 - Semest | er 1 |
| EGB240 | Electronic Design |
| | ftware Option Unit |
| Year 4 - Semest | er 2 |
| CAB403 | Systems Programming |
| Intermediate Ele Option Unit | ctrical or Software |
| Year 5 - Semest | er 1 |
| EGH404 | Research in Engineering Practice |
| EGH400-1 | Research Project 1 |
| Advanced Electr Unit | ical or Software Option |
| EGH456 | Embedded Systems |
| Year 5 - Semest | er 2 |
| EGH400-2 | Research Project 2 |
| EGH455 | Advanced Systems Design |
| Advanced Electr | ical Option Unit |
| Advanced Softw | are Option Unit |

Semesters

- Semester 1 (February) commencements
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
 Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
 Year 4 Semester 2
- Year 5 Semester 1

| Year 5 - | Semester 2 |
|--|--|
| Code | Title |
| Semester 1 (F | ebruary) commencements |
| Year 1 - Seme | ester 1 |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Seme | ester 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Seme | |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Seme | |
| CAB202 | Microprocessors and Digital Systems |
| EGB120 | Foundations of Electrical Engineering |
| Year 3 - Seme | ester 1 |
| EGB240 | Electronic Design |
| | Electromagnetics and |
| EGB241 | Machines |
| EGB241 Year 3 - Seme | Machines |
| | Machines |
| Year 3 - Seme EGB242 | Machines ester 2 |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at e. |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at e. |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at e. ester 1 Design and Practice |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at ester 1 Design and Practice nit Option |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at ester 1 Design and Practice nit Option |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at a. ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I Year 5 - Seme | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at e. ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I Seme EGH400-1 EGH404 | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice |
| Year 3 - Semo EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Semo EGB340 Foundation U Year 4 - Semo Intermediate I Intermediate I Year 5 - Semo EGH400-1 EGH404 Advanced Ele | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice estrical Option Unit (1) |
| Year 3 - Seme EGB242 Intermediate I EGB348 can brequisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I SeGH400-1 EGH404 Advanced Ele | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice ectrical Option Unit (1) ectrical Option Unit (2) |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I Year 5 - Seme EGH400-1 EGH404 Advanced Ele Year 5 - Seme | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at a. ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice extrical Option Unit (1) estrical Option Unit (2) ester 2 |
| Year 3 - Semo EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Semo EGB340 Foundation U Year 4 - Semo Intermediate I Year 5 - Semo EGH400-1 EGH404 Advanced Ele Year 5 - Semo EGH400-2 | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice ectrical Option Unit (1) ectrical Option Unit (2) ester 2 Research Project 2 |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I Intermediate I EGH400-1 EGH400-1 EGH404 Advanced Ele Year 5 - Seme EGH400-2 Advanced Ele | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice extrical Option Unit (1) extrical Option Unit (2) ester 2 Research Project 2 Research Project 2 extrical Option Unit (3) |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I Intermediate I SeGH400-1 EGH404 Advanced Ele Year 5 - Seme EGH400-2 Advanced Ele Advanced Ele | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice ectrical Option Unit (1) ectrical Option Unit (2) ester 2 Research Project 2 |

Semesters

• Semester 1 (February) commencements



| • | Year 1 | - Semester 1 |
|---|--------|--------------|
| | | |

- Year 1 Semester 2
- Year 2 Semester 1 . Year 2 - Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1 .
- Year 4 Semester 2 Year 5 Semester 1
- Year 5 Semester 2

Code Title Semester 1 (February) commencements Year 1 - Semester 1 Energy in Engineering **EGB113** Systems Introductory **MZB125** Engineering Mathematics Computational **MXB161** Explorations Year 1 - Semester 2 Engineering **EGB100** Sustainability and **Professional Practice** Engineering **MZB126** Computation Year 2 - Semester 1 Foundation of **EGB111 Engineering Design** EGB121 **Engineering Mechanics** Year 2 - Semester 2 Foundations of **EGB120 Electrical Engineering** Foundation Unit Option Year 3 - Semester 1 Microprocessors and CAB202 **Digital Systems EGB240 Electronic Design** Year 3 - Semester 2 **EGB242** Signal Analysis Intermediate Electrical Option Unit Year 4 - Semester 1 Aircraft Systems and **EGB243** Flight Systems Engineering EGB349 and Design Project Year 4 - Semester 2 Control and Dynamic **EGB345** Systems **Unmanned Aircraft EGB346** Systems Year 5 - Semester 1 EGH400-1 **Research Project 1** Research in EGH404 **Engineering Practice EGH446** Autonomous Systems

| EGH400-2 | Research Project 2 | |
|---------------------------------|---------------------------------------|--|
| EGH445 | Modern Control | |
| EGH450 | Advanced Unmanned Aircraft Systems | |
| Advanced Electrical Option Unit | | |

Semesters

| ٠ | Semester 1 | (February) |
|---|------------|---------------|
| | commencen | nents |
| | V | a s s t s u A |

- <u>Year 1 Semester 1</u> Year 1 - Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2 Year 5 - Semester 1
- Year 5 Semester 2

| • Tear 5 - Semester 2 | | | |
|-------------------------------------|--|--|--|
| Code | Title | | |
| Semester 1 (February) commencements | | | |
| Year 1 - Semest | ter 1 | | |
| EGB113 | Energy in Engineering Systems | | |
| MZB125 | Introductory Engineering Mathematics | | |
| OR | | | |
| MXB161 | Computational Explorations | | |
| Year 1 - Semest | ter 2 | | |
| EGB100 | Engineering Sustainability and Professional Practice | | |
| MZB126 | Engineering Computation | | |
| Year 2 - Semest | ter 1 | | |
| EGB111 | Foundation of Engineering Design | | |
| EGB121 | Engineering Mechanics | | |
| Year 2 - Semester 2 | | | |
| EGB120 | Foundations of Electrical Engineering | | |
| Foundation Unit Option | | | |
| Year 3 - Semester 1 | | | |
| EGB210 | Fundamentals of Mechanical Design | | |
| EGB214 | Materials and Manufacturing | | |
| Year 3 - Semest | ter 2 | | |
| EGB211 | Dynamics | | |
| EGB314 | Strength of Materials | | |
| Year 4 - Semest | ter 1 | | |
| EGB321 | Dynamics of Machines | | |
| EGB323 | Fluid Mechanics | | |
| Year 4 - Semest | ter 2 | | |
| EGB322 | Thermodynamics | | |
| EGH404 | Research in Engineering Practice | | |

| Year 5 - Semester 1 | | |
|---------------------|-------------------------------|--|
| EGB316 | Design of Machine Elements | |
| EGH400-1 | Research Project 1 | |
| EGH414 | Stress Analysis | |
| EGH421 | Vibration and Control | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH420 | Mechanical Systems Design | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |

Semesters

- Semester 1 (February) commencements
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title | | |
|-------------------------------------|--|--|--|
| Semester 1 (February) commencements | | | |
| Year 1 - Semest | er 1 | | |
| EGB113 | Energy in Engineering Systems | | |
| MZB125 | Introductory Engineering Mathematics | | |
| OR | | | |
| MXB161 | Computational Explorations | | |
| Year 1 - Semest | er 2 | | |
| EGB100 | Engineering Sustainability and Professional Practice | | |
| MZB126 | Engineering Computation | | |
| Year 2 - Semester 1 | | | |
| EGB111 | Foundation of Engineering Design | | |
| EGB121 | Engineering Mechanics | | |
| Year 2 - Semester 2 | | | |
| EGB120 | Foundations of Electrical Engineering | | |
| Foundation Unit Option | | | |
| Year 3 - Semester 1 | | | |
| EGB211 | Dynamics | | |
| EGB242 | Signal Analysis | | |
| Year 3 - Semest | er 2 | | |
| CAB202 | Microprocessors and Digital Systems | | |
| EGB345 | Control and Dynamic | | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

Advanced Electrical Option Unit

Year 5 - Semester 2

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE80&courseID=32944. CRICOS No.00213J



| | Systems | |
|-------------------------------------|-------------------------------------|--|
| Year 4 - Semester 1 | | |
| EGB220 | Mechatronics Design 1 | |
| EGB321 | Dynamics of Machines | |
| Year 4 - Semester 2 | | |
| EGB320 | Mechatronics Design 2 | |
| Intermediate Electrical Option Unit | | |
| Year 5 - Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH419 | Mechatronics Design 3 | |
| EGH446 | Autonomous Systems | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH413 | Advanced Dynamics | |
| EGH445 | Modern Control | |
| Advanced Electrical Option Unit | | |

Semesters

- Semester 1 (February)
- commencements
- Year 1 Semester 1
- Year 1 Semester 2
 Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- ٠
- Year 3 Semester 2 Year 4 Semester 1 .
- Year 4 Semester 2 ٠
- Year 5 Semester 1
- Year 5 Semester 2

Code Title

| Coue | THUE | | |
|-------------------------------------|--|--|--|
| Semester 1 (February) commencements | | | |
| Year 1 - Semester 1 | | | |
| EGB113 | Energy in Engineering Systems | | |
| MZB125 | Introductory Engineering Mathematics | | |
| OR | | | |
| MXB161 | Computational Explorations | | |
| Year 1 - Semester 2 | | | |
| EGB100 | Engineering Sustainability and Professional Practice | | |
| MZB126 | Engineering Computation | | |
| Year 2 - Semester 1 | | | |
| EGB111 | Foundation of Engineering Design | | |
| EGB121 | Engineering Mechanics | | |
| Year 2 - Semester 2 | | | |
| EGB120 | Foundations of Electrical Engineering | | |
| Foundation Unit Option | | | |
| Year 3 - Semester 1 | | | |

| 1000 | | |
|-------------|---|-------------------|
| | | |
| | | |
| | | |
| This inforr | mation is correct as at 10/12/2018. For the | e most up-to-date |
| https://w | /ww.student.aut.edu.au/enrolment/courses | s/course?courseC |

| EGB210 | Fundamentals of Mechanical Design | | |
|---------------------|--|--|--|
| LSB131 | Anatomy | | |
| Year 3 - Semest | er 2 | | |
| EGB211 | Dynamics | | |
| LSB231 | Physiology | | |
| Year 4 - Semest | er 1 | | |
| EGB214 | Materials and Manufacturing | | |
| EGB323 | Fluid Mechanics | | |
| Year 4 - Semester 2 | | | |
| EGB314 | Strength of Materials | | |
| EGH404 | Research in | | |
| | Engineering Practice | | |
| Year 5 - Semest | | | |
| EGB319 | BioDesign | | |
| EGH400-1 | Research Project 1 | | |
| EGH414 | Stress Analysis | | |
| EGH418 | Biomechanics | | |
| Year 5 - Semester 2 | | | |
| EGH400-2 | Research Project 2 | | |
| EGH424 | Biofluids | | |
| EGH435 | Modelling and Simulation for Medical Engineers | | |
| EGH438 | Biomaterials | | |



QUT

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | SE90 |
| CRICOS | 092649G |
| Duration (full-time) | 4 years |
| OP | 11 |
| Rank | 76 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$31,100 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | February |
| Int. Start Months | February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Graham Johnson (Science); Dr Ross Brown (Games and Interactive Environments; email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Marion Bateson (Biological Science); Dr James Blinco (Chemistry); Dr Luke Nothdurft (Earth Science); Dr Andrew Baker (Environmental Science); Prof Nunzio Motto (Physics). |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: At least one of Biology, Chemistry, Earth Science, Geography, Maths C or Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Domestic Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Science program and 192 credit points from the Bachelor of Games and Interactive Environments program.

Science component:

- 6 units (72 credit points) of science core units, which includes 2 units (24 credit points) of option units* selected from an approved list.
- 10 units (120 credit points) of Major core units.

Science component from 2018

- 5 units (60 credit points) of science core units, which includes 1 option
- 11 units (132 credit points) of Major core units.

Games and Interactive Environments component:

- 6 units (72 credit points) of games and interactive environments core units, which includes 2 units (24 credit points) of option units* selected from an approved list.
- 10 units (120 credit points) of Major core units.

* Unit options list - comprises a wide variety of foundation units from a range of disciplines offered at QUT. The core option choices can be used to complement your Major studies.

International Course structure

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Science program and 192 credit points from the Bachelor of Games and Interactive Environments program.

Science component:

- 6 units (72 credit points) of science core units, which includes 2 units (24 credit points) of option units* selected from an approved list.
- 10 units (120 credit points) of Major core units.

Science component from 2018

- 5 units (60 credit points) of science core units, which includes 1 option
- 11 units (132 credit points) of Major core units.

Games and Interactive Environments component:

- 6 units (72 credit points) of games and interactive environments core units, which includes 2 units (24 credit points) of option units* selected from an approved list.
 10 units (120 credit points) of Major
 - o 10 units (120 credit points) of Major core units.

* Unit options list - comprises a wide variety of foundation units from a range of disciplines offered at QUT. The core option choices can be used to complement your Major studies.

Sample Structure

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
 Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 1
 Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2



Bachelor of Science/Bachelor of Games and Interactive Environments

| Code | Title |
|------------------|--|
| Year 1 Semester | 1 |
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 1 Semester | 2 |
| Science Core Un | it Option |
| Science Major Ur | nit Option |
| Year 2 Semester | 1 |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| Year 2 Semester | 2 |
| BVB101 | Foundations of Biology |
| BVB102 | Evolution |
| Year 3 Semester | 1 |
| BVB202 | Experimental Design and Quantitative Methods |
| BVB301 | Animal Biology |
| Year 3 Semester | 2 |
| BVB201 | Biological Processes |
| BVB204 | Ecology |
| Year 4 Semester | 1 |
| BVB203 | Plant Biology |
| BVB305 | Microbiology and the Environment |
| Year 4 Semester | 2 |
| BVB304 | Integrative Biology |
| BVB313 | Population Genetics and Molecular Ecology |

| Semesters |
|-----------|
|-----------|

- Year 1 Semester 1
- Year 1 Semester 2 ٠
- Year 2 Semester 1 •
- ٠ Year 2 Semester 2
- •
- Year 3 Semester 1 Year 3 Semester 2 •
- Year 4 Semester 1 •
- Year 4 Semester 2 •

| Code | Title |
|--------------------------|-----------------------------------|
| Year 1 Semester 1 | |
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 1 Semester 2 | |
| MXB100 | Introductory Calculus and Algebra |
| Science Core Unit Option | |

| Year 2 Semester | 1 | |
|-------------------|---|--|
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 2 Semester 2 | 2 | |
| CVB101 | General Chemistry | |
| CVB102 | Chemical Structure and Reactivity | |
| Year 3 Semester | 1 | |
| CVB201 | Inorganic Chemistry | |
| CVB202 | Analytical Chemistry | |
| Year 3 Semester 2 | | |
| CVB203 | Physical Chemistry | |
| CVB204 | Organic Structure and Mechanisms | |
| Year 4 Semester | 1 | |
| CVB301 | Organic Chemistry: Strategies for Synthesis | |
| CVB302 | Applied Physical Chemistry | |
| Year 4 Semester 2 | | |
| CVB303 | Coordination Chemistry | |
| CVB304 | Chemistry Research Project | |
| | | |

Semesters

| Year 1 Semester 1 | |
|-------------------|---|
| Year 1 Semester 2 | 2 |
| Vear 2 Semester 1 | |

| • | rear 2 | Semester 1 |
|---|--------|------------|
| ٠ | Year 2 | Semester 2 |

- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
 Year 4 Semester 2

| Code | Title | |
|---------------------------|---------------------------------------|--|
| Year 1 Semeste | er 1 | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 1 Semeste | er 2 | |
| Science Core Unit Option | | |
| Science Major Unit Option | | |
| Year 2 Semester 1 | | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 2 Semester 2 | | |
| ERB101 | Earth Systems | |
| ERB102 | Evolving Earth | |
| Year 3 Semester 1 | | |
| ERB201 | Destructive Earth: Natural Hazards | |
| ERB202 | Marine Geoscience | |
| Year 3 Semester 2 | | |

| ERB304 | Dynamic Earth: Plate Tectonics |
|---|--|
| Semesters • Year 1 Sen • Year 2 Sen • Year 2 Sen • Year 3 Sen • Year 3 Sen • Year 4 Sen • Year 4 Sen | nester 2 nester 1 nester 2 nester 1 nester 2 nester 1 |
| Code Title | |
| Year 1 Semester 1 | |

Sedimentary Geology

and Stratigraphy Deforming Earth:

Fundamentals of Structural Geology

Chemical Earth

Basin Analysis

Applied Geophysics

Energy Resources and

ERB203

ERB204

ERB301

ERB302

ERB303

Year 4 Semester 1

Year 4 Semester 2

| Year 1 Semester | 1 |
|---|--|
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 1 Semester | 2 |
| Science Core Un | it Option |
| Science Major Ur | • |
| Year 2 Semester | 1 |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| Year 2 Semester | 2 |
| ERB101 | Earth Systems |
| EVB102 | Ecosystems and the Environment |
| Year 3 Semester | 1 |
| BVB202 | Experimental Design and Quantitative Methods |
| EVB203 | Geospatial Information |
| | Science |
| Year 3 Semester | Science |
| | Science |
| Year 3 Semester | Science 2 |
| Year 3 Semester BVB204 | Science 2 Ecology Environmental Pollution |
| Year 3 Semester BVB204 EVB302 | Science 2 Ecology Environmental Pollution |
| Year 3 Semester BVB204 EVB302 Year 4 Semester | Science 2 Ecology Environmental Pollution 1 |
| Year 3 Semester BVB204 EVB302 Year 4 Semester BVB311 EVB312 Year 4 Semester | Science 2 Ecology Environmental Pollution 1 Conservation Biology Soils and the Environment |
| Year 3 Semester BVB204 EVB302 Year 4 Semester BVB311 EVB312 | Science 2 Ecology Environmental Pollution 1 Conservation Biology Soils and the Environment |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE90&courseID=32945. CRICOS No.00213J

Bachelor of Science/Bachelor of Games and Interactive Environments

Environmental Science

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- ٠ Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2 Year 4 Semester 1
- Year 4 Semester 2 .

| Code | Title |
|-------------------|--|
| Year 1 Semester 1 | |
| SEB115 | Experimental Science 1 |
| SEB116 | Experimental Science 2 |
| Year 1 Semester 2 | |
| MXB100 | Introductory Calculus and Algebra |
| Science Core Unit | Option |
| Year 2 Semester 1 | |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| Year 2 Semester 2 | 2 |
| PVB101 | Physics of the Very Large |
| PVB102 | Physics of the Very Small |
| Year 3 Semester 1 | |
| PVB200 | Computational and Mathematical Physics |
| PVB203 | Experimental Physics |
| Year 3 Semester 2 |) - |
| PVB202 | Mathematical Methods in Physics |
| PVB204 | Electromagnetism |
| Year 4 Semester 1 | |
| PVB301 | Materials and Thermal Physics |
| PVB302 | Classical and Quantum Physics |
| Year 4 Semester 2 | 2 |
| PVB303 | Nuclear and Particle Physics |
| PVB304 | Physics Research |

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2

- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 Year 4, Semester 2 ٠ Code Title Year 1, Semester 1 **Computer Games IGB180** Studies Game Production and **IGB181** Technology Year 1, Semester 2 **IFB103** Designing for IT IFB104 **Building IT Systems** Year 2, Semester 1 Game Studio 1: Mini-**IGB100** Game Development **BGIE Core Unit Option** Year 2, Semester 2 **KNB127 CGI** Foundations **KNB135 Animation Aesthetics** Year 3, Semester 1 **Digital Worlds KNB137 BGIE Core Unit Option** Year 3, Semester 2 Game Studio 2: **IGB200 Applied Game** Development **KNB227** CGI Technologies Year 4, Semester 1 Capstone Project **IGB300** (Game Design) **KNB217 Digital Creatures** Year 4, Semester 2 **Capstone Project** IGB301 (Game Development)

Semesters

IGB400

Year 1, Semester 1

Game Studio 3:

Game Innovation

- Year 1, Semester 2
 Year 2, Semester 1
- Year 2, Semester 2 Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 .
- Year 4, Semester 2

| Code | Title |
|--------------------|--------------------------------|
| Year 1, Semester 1 | |
| IGB180 | Computer Games Studies |
| IGB181 | Game Production and Technology |
| Year 1, Semester 2 | |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| Year 2, Semester | 1 |

| IGB100 | Game Studio 1: Mini- Game Development | |
|--------------------|---|--|
| BGIE Core Unit C | ption | |
| Year 2, Semester | 2 | |
| IGB220 | Fundamentals of Game Design | |
| DXB304 | Interactive Narrative Design | |
| Year 3, Semester | 1 | |
| DXB303 | Programming for Visual Designers | |
| BGIE Core Unit C | ption | |
| Year 3, Semester | 2 | |
| IGB200 | Game Studio 2: Applied Game Development | |
| IGB321 | Immersive Game Level Design | |
| Year 4, Semester | 1 | |
| IGB320 | Game Design in Different Contexts | |
| IGB300 | Capstone Project (Game Design) | |
| Year 4, Semester 2 | | |
| IGB301 | Capstone Project (Game Development) | |
| IGB400 | Game Studio 3: Game Innovation | |

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2 ٠ •
- Year 4, Semester 1 Year 4, Semester 2

| Code | Title |
|-----------------------|--|
| Year 1, Semester 1 | |
| IGB180 | Computer Games Studies |
| IGB181 | Game Production and Technology |
| Year 1, Semester 2 | |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| Year 2, Semester 1 | |
| IGB100 | Game Studio 1: Mini- Game Development |
| BGIE Core Unit Option | |
| Year 2, Semester | 2 |
| CAB201 | Programming Principles |
| IGB283 | Game Engine Theory and Application |
| Year 3, Semester 1 | |
| CAB301 | Algorithms and |



Bachelor of Science/Bachelor of Games and Interactive Environments

| | Complexity |
|-----------------------|---|
| BGIE Core Unit Option | |
| Year 3, Semester 2 | |
| IGB200 | Game Studio 2: Applied Game Development |
| IGB381 | Game Engine Technology |
| Year 4, Semester | 1 |
| IGB383 | AI for Games |
| IGB300 | Capstone Project (Game Design) |
| Year 4, Semester 2 | |
| IGB301 | Capstone Project (Game Development) |
| IGB400 | Game Studio 3: Game Innovation |



QUT

Bachelor of Engineering (Honours)

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for all primary majors in this course.

Complementary Studies

You have the opportunity to undertake a second major or two minors. A second major is a set of eight units (96 credit points) in the same discipline. A minor is a set of four units (48 credit points) in the same discipline. You will select your primary major, second major and/or minors after the completion of your first year.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Course Design

Your QUT Bachelor of Engineering (Honours) degree consists of 384 credit points (32 units) arranged as follows:

(a) First Year: Four (4) core units 48cp + two (2) Discipline Foundation units 24cp + two (2) option units 24cp (96 credit points)

(b) Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

Available Majors are:

- Civil
- Computer and Software Systems
- Electrical
- · Electrical and Aerospace
- Mechatronics
- Mechanical
- · Medical, or • Process

(c) Complementary Studies: 1 x Second Major (8 unit set) or 2 x Minor (4 unit set each)from the options specified for your chosen major. (96 credit points)

Pathways to Further Study

The (EN01) Bachelor of Engineering (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs.

Sample Structure

| Code | Title |
|---------------------|--|
| Year 1 - Semester 1 | |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours)

| OR | |
|---|-------------------------------|
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 | Engineering Computation |
| Plus 36cp from ONE of the Engineering Foundation Strands | |

If you're intended to select Medical Engineering Major, please refer your first year study plan at <u>Medical major 1st</u> <u>Year - July Entry</u>

| Code | Title |
|---|--|
| Year 1 - Semest | er 2 |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational Explorations |
| EGB100 | Engineering Sustainability and Professional Practice |
| PVB101 | Physics of the Very Large |
| PVB101 is the substitute unit of EGB113 in semester 2 | |
| Plus select 12cp (1 unit) from ONE of the Engineering Foundation Strands | |
| Year 2 - Semester 1 | |
| MZB126 | Engineering Computation |
| EGB111 | Foundation of Engineering Design |
| Plus select 24cp (2 units) from ONE of the Engineering Foundation Strands | |



Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Brian Lee |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Civil) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major(192 credit points): one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp
- Complementary studies(96 credit points): one x second major or two x minor.

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major(192 credit points): one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp
- Complementary studies(96 credit points): one x second major or two x minor .

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

Sample Structure

| Code | Title |
|---------------------|--|
| Year 1 - Semester 1 | |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering |

Bachelor of Engineering (Honours) (Civil)

| | Mathematics |
|---|-------------------------------|
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 | Engineering Computation |
| Plus 36cp from ONE of the Engineering Foundation Strands | |

Semesters

- Year 2, Semester 1
- . Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 Year 4, Semester 2

| Code | Title | |
|----------------------|---|--|
| Year 2, Semeste | r 1 | |
| EGB270 | Civil Engineering Materials | |
| EGB272 | Traffic and Transport Engineering | |
| EGB275 | Structural Mechanics | |
| EGB371 | Engineering Hydraulics | |
| Year 2, Semeste | r 2 | |
| EGB273 | Principles of Construction | |
| EGB373 | Geotechnical Engineering | |
| EGB376 | Steel Design | |
| EGH471 | Advanced Water Engineering | |
| Year 3, Semeste | r 1 | |
| EGB375 | Design of Concrete Structures | |
| EGH473 | Advanced Geotechnical Engineering | |
| 2nd Major/Minor | unit | |
| 2nd Major/Minor | unit | |
| Year 3, Semeste | r 2 | |
| EGH404 | Research in Engineering Practice | |
| EGH472 | Advanced Highway and Pavement Engineering | |
| EGH475 | Advanced Concrete Structures | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |

2nd Major/Minor unit

| | Year 4, Semester 2 | |
|----------------------|--------------------|---|
| | EGH400-2 | Research Project 2 |
| | EGH479 | Advances in Civil Engineering Practice |
| 2nd Major/Minor unit | | |

2nd Major/Minor unit

Semesters

- Year 2, Semester 2
 Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2 • Year 5, Semester 1

| • <u>Year 5, Semester 1</u> | | | |
|-----------------------------|---|--|--|
| Code | Title | | |
| Year 2, Semester | | | |
| EGB273 | Principles of Construction | | |
| EGB275 | Structural Mechanics | | |
| EGB373 | Geotechnical Engineering | | |
| 2nd Major/Minor | unit | | |
| Year 3, Semester | r 1 | | |
| EGB272 | Traffic and Transport Engineering | | |
| EGB270 | Civil Engineering Materials | | |
| EGB371 | Engineering Hydraulics | | |
| 2nd Major/Minor | unit | | |
| Year 3, Semester | r 2 | | |
| EGB376 | Steel Design | | |
| EGH471 | Advanced Water Engineering | | |
| EGH472 | Advanced Highway and Pavement Engineering | | |
| 2nd Major/Minor unit | | | |
| Year 4, Semester | r 1 | | |
| EGB375 | Design of Concrete Structures | | |
| EGH404 | Research in Engineering Practice | | |
| EGH473 | Advanced Geotechnical Engineering | | |
| 2nd Major/Minor | unit | | |
| Year 4, Semester | Year 4, Semester 2 | | |
| EGH475 | Advanced Concrete Structures | | |
| EGH479 | Advances in Civil Engineering Practice | | |
| EGH400-1 | Research Project 1 | | |
| 2nd Major/Minor unit | | | |
| Year 5, Semester | r 1 | | |
| EGH400-2 | Research Project 2 | | |

2nd Major/Minor unit

- 2nd Major/Minor unit
- 2nd Major/Minor unit

The following Second Majors are highly recommended for students undertaking the Civil Major:

- Construction Engineering Second Major (EN01SMJ-CONSTRU)
- Environmental Engineering Second Major (EN01SMJ-ENVIRNL)

Title

- Structural Engineering Second Major (EN01SMJ-STRUENG)
- Transport Engineering Second Major (EN01SMJ-TRANSEN)

NOTE: Code

These Second Majors are listed first, with other available Second Majors listed below these.

Study Area Description

For more details and description on this minor please refer to the EN01 Complementary Studies at the Faculty's Student Zone under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on statistical science (suggested pathway: MXB101, MXB107, MXB202, MXB242), mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- Unit List
- <u>SUGGESTED PATHWAYS</u>
- <u>Statistical Science</u>
- Mathematical and Statistical Modelling
- Applied Mathematics
- Simulation Science
- Computation, modelling and simulation

| Unit List | | |
|--|--|--|
| Code | Title | |
| Select 2 units (24 credit points) from Unit Option List 1: | | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and | |



Bachelor of Engineering (Honours) (Civil)

| | Two Variables | |
|--|--|--|
| MXB106 | Linear Algebra and Differential Equations | |
| MXB107 | Introduction to Statistical Modelling | |
| Select 2 units (24 credit points) from Unit Option List 2: | | |
| MXB202 | Advanced Calculus | |
| MXB221 | Ordinary Differential Equations | |
| MXB232 | Introduction to Operations Research | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| MXB242 | Regression and Design | |
| MXB261 | Modelling and Simulation Science | |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling 2 |

| Applied Mathematics | |
|---------------------|--|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential Equations |

| Simulation Science | |
|--------------------|-----------------|
| Code | Title |
| MXB101 | Probability and |

| | Stochastic Modelling 1 |
|--------|--|
| MXB106 | Linear Algebra and Differential Equations |
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |

| Computation, modelling and simulation | |
|---------------------------------------|--|
| Code | Title |
| MXB103 | Introductory Computational Mathematics |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB261 | Modelling and Simulation Science |

QUT

Bachelor of Engineering (Honours) (Computer and Software Systems)

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Wayne Kelly |
| | w.kelly@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Computer and Software Systems) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

Sample Structure

| Code | Title |
|---------------------|--|
| Year 1 - Semester 1 | |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours) (Computer and Software Systems)

| OR | |
|--|-------------------------------|
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 | Engineering Computation |
| Plus 36cp from ONE of the Engineering Foundation Strands | |

Please note -

This is an example study plan for students on a relatively standard progression, however, depending on which units and second majors/minors you choose, you may need to deviate from that plan. Please contact your Subject Area Coordinator **Dr Wayne Kelly**, Email: <u>w.kelly@qut.edu.au</u> if you wish to discuss your study plan options.

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title | |
|---|--|--|
| Year 2, Semester 1 | | |
| EGB240 | Electronic Design | |
| CAB201 | Programming Principles | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor un | it | |
| Year 2, Semester 2 | | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB242 | Signal Analysis | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor un | it | |
| Year 3, Semester 1 | | |
| Intermediate Softwa | are Unit Option | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 2 | | |
| CAB403 | Systems Programming | |
| Intermediate Electrical Unit Option | | |
| Intermediate Electrical or Software Unit Option | | |
| EGH404 | Research in Engineering Practice | |
| Year 4, Semester 1 | | |
| Advanced Electrica | Unit Option | |
| EGH400-1 | Research Project 1 | |

| EGH456 | Embedded Systems |
|--|----------------------------|
| 2nd Major/Minor unit | |
| Year 4, Semester 2 | |
| EGH400-2 | Research Project 2 |
| EGH455 | Advanced Systems Design |
| Advanced Electrical or Software Unit Option | |
| Advanced Software Unit Option | |

If you intend to select the Civil Engineering Major, please refer your first year study plan at <u>Civil major 1st</u> <u>Year - July Entry</u>.

OR

If you intend to select the Medical Engineering Major, please refer your first year study plan at <u>Medical major 1st</u> <u>Year - July Entry</u>.

| Code | Title | |
|------------------------|--|--|
| Year 1 - Semest | er 2 | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| EGB113 | Energy in Engineering Systems | |
| OR | | |
| PVB101 | Physics of the Very Large | |
| EGB123 | Civil Engineering Systems | |
| OR | | |
| Foundation Unit Option | | |
| Year 2 - Semest | er 1 | |
| MZB126 | Engineering Computation | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| EGB120 | Foundations of Electrical Engineering | |
| OR | | |
| Foundation Unit | Option | |

Please note -

This is an example study plan for students on a relatively standard progression, however, depending on which units and second majors/minors you choose, you may need to deviate from that plan. Please contact your Subject Area Coordinator **Dr Wayne Kelly**, Email: <u>w.kelly@qut.edu.au</u> if you wish to discuss your study plan options.

Semesters

- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Year 5, Semester 1

| Code | Title | |
|--|--|--|
| Year 2, Semester 2 | | |
| CAB201 | Programming Principles | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB242 | Signal Analysis | |
| 2nd Major/Minor un | it | |
| Year 3, Semester 1 | | |
| EGB240 | Electronic Design | |
| Intermediate Softwa | are Unit Option | |
| Intermediate Software Unit Option | | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 2 | | |
| CAB403 | Systems Programming | |
| Intermediate Electri | cal Unit Option | |
| 2nd Major/Minor un | it | |
| 2nd Major/Minor un | it | |
| Year 4, Semester 1 | | |
| EGH404 | Research in Engineering Practice | |
| EGH456 | Embedded Systems | |
| Advanced Electrica | I Unit Option | |
| Advanced Software Unit Option | | |
| Year 4, Semester 2 | | |
| EGH400-1 | Research Project 1 | |
| EGH455 | Advanced Systems Design | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor un | | |
| 2nd Major/Minor un Year 5, Semester 1 | | |
| - | Research Project 2 | |
| Year 5, Semester 1 | Research Project 2 | |
| Year 5, Semester 1 EGH400-2 | Research Project 2 I Unit Option | |

Study Area Description

For more details and description on this minor please refer to the <u>EN01</u> <u>Complementary Studies</u> at the Faculty's <u>Student Zone</u> under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on **statistical**



Bachelor of Engineering (Honours) (Computer and Software Systems)

science (suggested pathway: MXB101, MXB107, MXB202, MXB242),

mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- Unit List
- SUGGESTED PATHWAYS
- Statistical Science
- Mathematical and Statistical Modelling
- Applied Mathematics
- Simulation Science
- <u>Computation, modelling and</u> <u>simulation</u>

Unit List

| Code | Title |
|--------------------------------------|--------------------------|
| Select 2 units (24 Option List 1: | credit points) from Unit |

| MXB101 | Probability and Stochastic Modelling 1 | |
|--|--|--|
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| MXB107 | Introduction to Statistical Modelling | |
| Select 2 units (24 credit points) from Unit Option List 2: | | |
| MXB202 | Advanced Calculus | |
| MXB221 | Ordinary Differential Equations | |
| MXB232 | Introduction to Operations Research | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| | | |
| MXB242 | Regression and Design | |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |

| MXB107 | Introduction to Statistical Modelling |
|--------|--|
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling 2 |

| Applied Mathematics | |
|---------------------|--|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential Equations |

| Simulation Science | |
|--------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB106 | Linear Algebra and Differential Equations |
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |

| Computation, modelling and simulation | |
|---------------------------------------|--|
| Code | Title |
| MXB103 | Introductory Computational Mathematics |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB261 | Modelling and Simulation Science |



| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Aaron Mcfadyen |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International Testing System) | English Language |
|---|------------------|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Electrical and Aerospace) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

Sample Structure

| Code | Title |
|-----------------|--|
| Year 1 - Semest | er 1 |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours) (Electrical and Aerospace)

| OR | |
|-------------------------------------|-------------------------------|
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 | Engineering Computation |
| Plus 36cp from 0 Foundation Stra | ONE of the Engineering nds |

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title |
|----------------------------------|--|
| Year 2, Semester | 1 |
| EGB240 | Electronic Design |
| CAB202 | Microprocessors and Digital Systems |
| EGB242 | Signal Analysis |
| EGB243 | Aircraft Systems and Flight |
| Year 2, Semester 2 | 2 |
| EGB345 | Control and Dynamic Systems |
| EGB346 | Unmanned Aircraft Systems |
| Intermediate Electrony Option | rical & Aerospace Unit |
| 2nd Major/Minor un | nit |
| Year 3, Semester | 1 |
| EGB349 | Systems Engineering and Design Project |
| Advanced Electrica Option | al & Aerospace Unit |
| 2nd Major/Minor u | nit |
| 2nd Major/Minor un | nit |
| Year 3, Semester 2 | 2 |
| EGH445 | Modern Control |
| EGH450 | Advanced Unmanned Aircraft Systems |
| 2nd Major/Minor u | nit |
| EGH404 | Research in Engineering Practice |
| Year 4, Semester | 1 |
| EGH400-1 | Research Project 1 |
| EGH446 | Autonomous Systems |
| 2nd Major/Minor u | nit |
| 2nd Major/Minor un | nit |
| Year 4, Semester 2 | 2 |
| EGH400-2 | Research Project 2 |
| Advanced Electrica Option | al & Aerospace Unit |

2nd Major/Minor unit 2nd Major/Minor unit

If you intend to select the Civil Engineering Major, please refer your first year study plan at Civil major 1st Year - July Entry.

OR

If you intend to select the Medical Engineering Major, please refer your first year study plan at Medical major 1st Year - July Entry.

| Code | Title |
|---------------------|--|
| Year 1 - Semester 2 | |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational Explorations |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB113 | Energy in Engineering Systems |
| OR | |
| PVB101 | Physics of the Very Large |
| EGB123 | Civil Engineering Systems |
| OR | |
| Foundation Unit | Option |
| Year 2 - Semest | er 1 |
| MZB126 | Engineering Computation |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| EGB120 | Foundations of Electrical Engineering |
| OR | |

Foundation Unit Option

Semesters

- Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Year 5, Semester 1

| Code | Title |
|----------------------|-------------------------------------|
| Year 2, Semester 2 | |
| CAB202 | Microprocessors and Digital Systems |
| EGB242 | Signal Analysis |
| 2nd Major/Minor unit | |
| 2nd Major/Minor unit | |

| Year 3, Semester | 1 | |
|--|---|--|
| EGB240 | Electronic Design | |
| EGB243 | Aircraft Systems and Flight | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 2 | 2 | |
| EGB345 | Control and Dynamic Systems | |
| EGB346 | Unmanned Aircraft Systems | |
| Intermediate Electrical & Aerospace Unit Option | | |
| 2nd Major/Minor un | nit | |
| Year 4, Semester | 1 | |
| EGB349 | Systems Engineering and Design Project | |
| EGH404 | Research in Engineering Practice | |
| 2nd Major/Minor u | nit | |
| 2nd Major/Minor u | nit | |
| | _ | |
| Year 4, Semester 2 | 2 | |
| Year 4, Semester 2 EGH400-1 | 2 Research Project 1 | |
| | | |
| EGH400-1 | Research Project 1 | |
| EGH400-1 EGH445 EGH450 | Research Project 1 Modern Control Advanced Unmanned Aircraft | |
| EGH400-1 EGH445 EGH450 Advanced Electrica | Research Project 1 Modern Control Advanced Unmanned Aircraft Systems al & Aerospace Unit | |
| EGH400-1 EGH445 EGH450 Advanced Electrica Option | Research Project 1 Modern Control Advanced Unmanned Aircraft Systems al & Aerospace Unit | |
| EGH400-1 EGH445 EGH450 Advanced Electrica Option Year 5, Semester | Research Project 1 Modern Control Advanced Unmanned Aircraft Systems al & Aerospace Unit | |
| EGH400-1 EGH445 EGH450 Advanced Electrica Option Year 5, Semester EGH400-2 EGH446 | Research Project 1 Modern Control Advanced Unmanned Aircraft Systems al & Aerospace Unit Research Project 2 Autonomous | |

Study Area Description

For more details and description on this minor please refer to the EN01 Complementary Studies at the Faculty's Student Zone under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on **statistical** science (suggested pathway: MXB101, MXB107, MXB202, MXB242), mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

Bachelor of Engineering (Honours) (Electrical and Aerospace)

In this list

- Unit List
- SUGGESTED PATHWAYS
- Statistical Science
- Mathematical and Statistical Modelling
- <u>Applied Mathematics</u>
- Simulation Science
- <u>Computation, modelling and</u>
 <u>simulation</u>

Unit List Code

CodeTitleSelect 2 units (24 credit points) from UnitOption List 1:

| MXB101 | Probability and Stochastic Modelling 1 | |
|--|--|--|
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| MXB107 | Introduction to Statistical Modelling | |
| Select 2 units (24 credit points) from Unit Option List 2: | | |
| MXB202 | Advanced Calculus | |
| MXB221 | Ordinary Differential Equations | |
| MXB232 | Introduction to Operations Research | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| MXB242 | Regression and Design | |
| MXB261 | Modelling and | |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |

| MXB105 | Calculus of One and Two Variables |
|--------|--|
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling 2 |

| Applied Mathematics | |
|---------------------|---|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential Equations |

| Simulation Science | |
|--------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB106 | Linear Algebra and Differential Equations |
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |

| Computation, modelling and simulation | |
|---------------------------------------|--|
| Code | Title |
| MXB103 | Introductory Computational Mathematics |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB261 | Modelling and Simulation Science |



| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Jacob Coetzee 3138 2865 jacob.coetzee@qut.edu.a u |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Electrical) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

Sample Structure

| Code | Title | |
|-----------------|--|--|
| Year 1 - Semest | Year 1 - Semester 1 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| EGB111 | Foundation of Engineering Design | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |



Bachelor of Engineering (Honours) (Electrical)

| UK | |
|---|-------------------------------|
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 | Engineering Computation |
| Plus 36cp from ONE of the Engineering Foundation Strands | |

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- ٠
- Year 3, Semester 2 Year 4, Semester 1 ٠
- Year 4, Semester 2 •
- Intermediate Electrical Unit Options ٠ List
- Advanced Electrical Unit Options ٠ <u>List</u>

| Code | Title | |
|---|--|--|
| Year 2, Semester | 1 | |
| EGB241 | Electromagnetics and Machines | |
| EGB242 | Signal Analysis | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB240 | Electronic Design | |
| Year 2, Semester | 2 | |
| Intermediate Elect | rical Option Unit[1] | |
| Intermediate Elect | rical Option Unit[2] | |
| Intermediate Electrical Option Unit[3] | | |
| 2nd Major/Minor u | | |
| Year 3, Semester | | |
| EGB340 | Design and Practice | |
| Advanced Electric | • | |
| | al Option Unit [2]or | |
| 2nd Major/Minor u | | |
| 2nd Major/Minor u | nit[3] | |
| Year 3, Semester | 2 | |
| Advanced Electric | al Option Unit[3] | |
| Advanced Electric | al Option Unit[4] | |
| 2nd Major/Minor unit[2] or Advanced Electrical Option Unit [2] | | |
| EGH404 | Research in Engineering Practice | |
| Year 4, Semester | 1 | |
| EGH400-1 | Research Project 1 | |
| 2nd Major/Minor u | nit[4] | |
| 2nd Major/Minor unit[5] | | |
| 2nd Major/Minor unit[6] | | |
| Year 4, Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| Advanced Electric | - | |
| 2nd Major/Minor unit[7] | | |
| | | |

| 2nd Major/Minor u | 2nd Major/Minor unit[8] | |
|---|--|--|
| Intermediate Elec | trical Unit Options List | |
| EGB341 | Energy Supply and Delivery | |
| EGB342 | Telecommunications and Signal Processing | |
| EGB345 | Control and Dynamic Systems | |
| EGB348 | Electronics | |
| Advanced Electrical Unit Options List | | |
| EGH441 | Power System Modelling | |
| EGH442 | RF Techniques and Applications | |
| EGH443 | Advanced Telecommunications | |
| EGH444 | Digital Signals and Image Processing | |
| EGH445 | Modern Control | |
| EGH446 | Autonomous Systems | |
| EGH448 | Power Electronics | |
| EGH449 | Advanced Electronics | |
| The following unit options have been discontinued, but will still count towards | | |

this minor:

EGH440 Power Systems Analysis (disc 31/12/2018)

If you intend to select the Civil Engineering Major, please refer your first year study plan at Civil major 1st Year - July Entry.

OR

If you intend to select the Medical Engineering Major, please refer your first year study plan at Medical major 1st Year - July Entry.

| Code | Title | |
|-----------------|--|--|
| Year 1 - Semest | ter 2 | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| EGB113 | Energy in Engineering Systems | |
| OR | | |
| PVB101 | Physics of the Very Large | |
| EGB123 | Civil Engineering Systems | |
| OR | | |

| Foundation Unit Option | |
|------------------------|--|
| Year 2 - Semester 1 | |
| MZB126 | Engineering Computation |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| EGB120 | Foundations of Electrical Engineering |
| OR | |
| Foundation Unit Option | |

Please refer to the Engineering Honours Majors page under "Your Course" at the Faculty's Student Zone for more details, including a course diagram, on the Electrical engineering major.

Semesters

- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
 Year 4, Semester 2
- Year 5, Semester 1 Intermediate Electrical Unit Options
- List Advanced Electrical Unit Options • List

| Code | Title | |
|---|--|--|
| Year 2, Semester 2 | | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB242 | Signal Analysis | |
| 2nd Major/Minor Unit[1] | | |
| 2nd Major/Minor L | Init[2] | |
| Year 3, Semester | 1 | |
| EGB240 | Electronic Design | |
| EGB241 | Electromagnetics and Machines | |
| 2nd Major/Minor L | Init[3] | |
| 2nd Major/Minor L | Init[4] | |
| Year 3, Semester | 2 | |
| Intermediate Electrical Option Unit[1] | | |
| Intermediate Electrical Option Unit[2] | | |
| Intermediate Elect | rical Option Unit[3] | |
| 2nd Major/Minor L | Init[5] | |
| Year 4, Semester | 1 | |
| EGB340 | Design and Practice | |
| EGH404 | Research in Engineering Practice | |
| Advanced Electrical Option Unit[1] | | |
| Advanced Electrical Option Unit[2] | | |
| Year 4, Semester | 2 | |
| EGH400-1 | Research Project 1 | |
| Advanced Electrical Option Unit[5] or 2nd Major/Minor unit[6] | | |
| Advanced Electrical Option Unit[3] | | |

Bachelor of Engineering (Honours) (Electrical)

Advanced Electrical Option Unit[4] Year 5, Semester 1 EGH400-2 **Research Project 2** Advanced Electrical Option Unit [5]or 2nd Major/Minor unit[6] 2nd Major/Minor unit[7] 2nd Major/Minor unit[8] Intermediate Electrical Unit Options List Energy Supply and EGB341 Delivery Telecommunications **EGB342** and Signal Processing Control and Dynamic **EGB345** Systems EGB348 Electronics Advanced Electrical Unit Options List Power System EGH441 Modelling RF Techniques and **EGH442** Applications Advanced **EGH443 Telecommunications Digital Signals and EGH444** Image Processing **EGH445** Modern Control EGH446 Autonomous Systems **EGH448 Power Electronics EGH449** Advanced Electronics The following unit options have been

discontinued, but will still count towards this minor:

EGH440 Power Systems Analysis (disc 31/12/2018)

Study Area Description

For more details and description on this minor please refer to the EN01 **Complementary Studies** at the Faculty's Student Zone under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on statistical science (suggested pathway: MXB101, MXB107, MXB202, MXB242), mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- Unit List
- SUGGESTED PATHWAYS
- Statistical Science . Mathematical and Statistical

- Modelling
- Applied Mathematics
- <u>Simulation Science</u>
- Computation, modelling and • simulation

Unit List

Code Title Select 2 units (24 credit points) from Unit Option List 1: Probability and **MXB101** Stochastic Modelling Introductory **MXB103** Computational **Mathematics** Calculus of One and **MXB105** Two Variables Linear Algebra and **MXB106 Differential Equations** Introduction to **MXB107** Statistical Modelling Select 2 units (24 credit points) from Unit Option List 2: **MXB202** Advanced Calculus **Ordinary Differential MXB221** Equations Introduction to **MXB232 Operations Research** Probability and **MXB241** Stochastic Modelling 2 Regression and **MXB242** Design Modelling and **MXB261** Simulation Science

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and |

Stochastic Modelling 2

| Applied Mathematics | |
|---------------------|---|
| Code Title | |
| Coue | |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential Equations |

| Simulation Science | |
|--------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB106 | Linear Algebra and Differential Equations |
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |

| Computation, modelling and simulation | |
|---------------------------------------|--|
| Code | Title |
| MXB103 | Introductory Computational Mathematics |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB261 | Modelling and Simulation Science |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=EN01&courseID=32719. CRICOS No.00213J



| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Professor Ted Steinberg |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

candidate for the degree of Bachelor of Engineering (Honours)(Mechanical) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

Sample Structure

| Code | Title |
|---------------------|--|
| Year 1 - Semester 1 | |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours) (Mechanical)

| OR | | |
|--|-------------------------------|--|
| MXB161 | Computational Explorations | |
| Year 1 - Semester 2 | | |
| MZB126 | Engineering Computation | |
| Plus 36cp from ONE of the Engineering Foundation Strands | | |

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2 •
- ٠
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title | |
|-----------------------------|--|--|
| Year 2, Semester 1 | | |
| EGB210 | Fundamentals of Mechanical Design | |
| EGB211 | Dynamics | |
| EGB214 | Materials and Manufacturing | |
| EGB323 | Fluid Mechanics | |
| Year 2, Semester 2 | | |
| EGB314 | Strength of Materials | |
| EGB322 | Thermodynamics | |
| 2nd Major/Minor unit option | | |
| 2nd Major/Minor unit option | | |
| Year 3, Semester 1 | | |
| EGB316 | Design of Machine Elements | |
| EGB321 | Dynamics of Machines | |
| EGH414 | Stress Analysis | |
| 2nd Major/Minor un | it option | |
| Year 3, Semester 2 | | |
| EGH404 | Research in Engineering Practice | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |
| 2nd Major/Minor un | it option | |
| Year 4, Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| EGH421 | Vibration and Control | |
| 2nd Major/Minor unit option | | |
| 2nd Major/Minor unit option | | |
| Year 4, Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH420 | Mechanical Systems Design | |
| 2nd Major/Minor unit option | | |
| | it option | |

If you intend to select the Civil Engineering Major, please refer your first year study plan at Civil major 1st Year - July Entry.

OR

If you intend to select the Medical Engineering Major, please refer your first year study plan at Medical major 1st Year - July Entry.

| Code | Title | |
|-----------------|--|--|
| Year 1 - Semest | er 2 | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| EGB113 | Energy in Engineering Systems | |
| OR | | |
| PVB101 | Physics of the Very Large | |
| EGB123 | Civil Engineering Systems | |
| OR | | |
| Foundation Unit | Option | |
| Year 2 - Semest | er 1 | |
| MZB126 | Engineering Computation | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| EGB120 | Foundations of Electrical Engineering | |
| OR | | |
| Foundation Unit | Option | |

Semesters

- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
 Year 5, Semester 1

| Code | Title |
|----------------------|--------------------------------------|
| Year 2, Semester 2 | |
| EGB211 | Dynamics |
| EGB314 | Strength of Materials |
| 2nd Major/Minor unit | |
| 2nd Major/Minor unit | |
| Year 3, Semester 1 | |
| EGB210 | Fundamentals of Mechanical Design |

| EGB214 | Materials and | |
|----------------------|--|--|
| 505000 | Manufacturing | |
| EGB323 | Fluid Mechanics | |
| 2nd Major/Minor uni | t | |
| Year 3, Semester 2 | | |
| EGB322 | Thermodynamics | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor uni | t | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 1 | | |
| EGB316 | Design of Machine Elements | |
| EGB321 | Dynamics of Machines | |
| EGH404 | Research in Engineering Practice | |
| EGH414 | Stress Analysis | |
| Year 4, Semester 2 | | |
| EGH400-1 | Research Project 1 | |
| EGH420 | Mechanical Systems Design | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |
| Year 5, Semester 1 | | |
| EGH400-2 | Research Project 2 | |
| EGH421 | Vibration and Control | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |

Semesters

• Year 2, Semester 2

Year 3, Semester 1

- Year 3, Semester 2
- Year 4, Semester 1
 Year 4, Semester 2
- Year 5, Semester 1

| Code | Title | |
|----------------------|--------------------------------------|--|
| Year 2, Semester 2 | | |
| EGB211 | Dynamics | |
| EGB322 | Thermodynamics | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 1 | | |
| EGB210 | Fundamentals of Mechanical Design | |
| EGB214 | Materials and Manufacturing | |
| EGB323 | Fluid Mechanics | |
| 2nd Major/Minor unit | | |
| Year 3, Semester 2 | | |
| EGB314 | Strength of Materials | |
| EGH422 | Advanced Thermodynamics | |

QU

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=EN01&courseID=32727. CRICOS No.00213J

Bachelor of Engineering (Honours) (Mechanical)

| EGH423 | Fluids Dynamics | |
|----------------------|--|--|
| 2nd Major/Minor uni | it | |
| Year 4, Semester 1 | | |
| EGB316 | Design of Machine Elements | |
| EGB321 | Dynamics of Machines | |
| EGH404 | Research in Engineering Practice | |
| EGH414 | Stress Analysis | |
| Year 4, Semester 2 | | |
| EGH400-1 | Research Project 1 | |
| EGH420 | Mechanical Systems Design | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 5, Semester 1 | | |
| EGH400-2 | Research Project 2 | |
| EGH421 | Vibration and Control | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| | | |

Study Area Description

For more details and description on this minor please refer to the <u>EN01</u> <u>Complementary Studies</u> at the Faculty's <u>Student Zone</u> under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on **statistical science** (suggested pathway: MXB101, MXB107, MXB202, MXB242), **mathematical and statistical modelling** (suggested pathway: MXB101, MXB105, MXB221, MXB241), **applied mathematics** (suggested pathway: MXB105, MXB106, MXB202, MXB221), **simulation** (suggested pathway: MXB101, MXB106, MXB232, MXB261), **computation and modelling** (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- <u>Unit List</u>
- SUGGESTED PATHWAYS
- <u>Statistical Science</u>
 <u>Mathematical and Statistical</u>
- <u>Modelling</u>
- Applied Mathematics
- <u>Simulation Science</u>
- <u>Computation, modelling and</u> <u>simulation</u>

| Unit List | | |
|---|---|--|
| Code | Title | |
| Select 2 units (24 credit points) from Unit Option List 1: | | |
| MXB101 | Probability and Stochastic Modelling | |

| | 1 | |
|---|--|--|
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| MXB107 | Introduction to Statistical Modelling | |
| Select 2 units (24 credit points) from Unit Option List 2: | | |
| MXB202 | Advanced Calculus | |
| MXB221 | Ordinary Differential Equations | |
| MXB232 | Introduction to Operations Research | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| MXB242 | Regression and Design | |
| MXB261 | Modelling and Simulation Science | |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling 2 |

| Applied Mathematics | |
|---------------------|--|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential |

| | Equations | |
|---------------------------------------|--|--|
| | | |
| Simulation Science | 9 | |
| Code | Title | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| MXB106 | Linear Algebra and Differential Equations | |
| MXB232 | Introduction to Operations Research | |
| MXB261 | Modelling and Simulation Science | |
| | | |
| Computation, modelling and simulation | | |
| Code | Title | |

| Title |
|--|
| Introductory Computational Mathematics |
| Calculus of One and Two Variables |
| Ordinary Differential Equations |
| Modelling and Simulation Science |
| |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=EN01&courseID=32727. CRICOS No.00213J



| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Associate Professor Jason Ford |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|---|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Mechatronics) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Strudent Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

Sample Structure

| Code | Title |
|-----------------|--|
| Year 1 - Semest | er 1 |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours) (Mechatronics)

| OR | |
|--|-------------------------------|
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 Engineering Computation | |
| Plus 36cp from ONE of the Engineering Foundation Strands | |

Please note that the highlighted units must be enrolled in the year and semester specified

The highlighted units are EGB242, CAB202, EGB345, EGH446, SEB400, EGH400-1 and EGH400-2

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
- ٠ Year 3, Semester 1
- Year 3, Semester 2 ٠
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title | |
|---------------------------------|--|--|
| Year 2, Semester 1 | | |
| EGB242 | Signal Analysis | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB220 | Mechatronics Design 1 | |
| 2nd Major/Minor un | it | |
| EGB211 | Dynamics | |
| 2nd Major/Minor Un | iit | |
| Year 2, Semester 2 | | |
| EGB345 | Control and Dynamic Systems | |
| EGB320 | Mechatronics Design 2 | |
| 2nd Major/Minor un | it | |
| EGB211 | Dynamics | |
| 2nd Major/Minor unit | | |
| Intermediate Electri | cal Unit Option | |
| 2nd major/Minor un | it | |
| Year 3, Semester 1 | | |
| EGH446 | Autonomous Systems | |
| EGB321 | Dynamics of Machines | |
| 2nd Major/Minor unit | | |
| EGB220 | Mechatronics Design 1 | |
| OR | | |
| EGH419 | Mechatronics Design 3 | |
| 2nd major/Minor unit | | |
| Advanced Electrical Unit Option | | |

| 2nd Major/Minor unit | | |
|--|--|--|
| Year 3, Semester 2 | | |
| EGH404 | Research in Engineering Practice | |
| EGB320 | Mechatronics Design 2 | |
| EGH445 | Modern Control | |
| Intermediate/ Advanced Electrical Unit Option | | |
| 2nd Major/Minor unit | | |
| EGH413 | Advanced Dynamics | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| EGH419 | Mechatronics Design 3 | |
| 2nd Major/Minor unit | | |
| Advanced Electrical Unit Option | | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor uni | it | |
| Year 4, Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH413 | Advanced Dynamics | |
| 2nd Major/Minor unit | | |
| EGH445 | Modern Control | |
| 2nd Major/Minor unit | | |
| Advanced Electrical Unit Options | | |
| 2nd Major/Minor unit | | |

2nd Major/Minor unit

2nd Major/Minor unit

If you intend to select the Civil Engineering Major, please refer your first year study plan at Civil major 1st Year - July Entry.

OR

If you intend to select the Medical Engineering Major, please refer your first year study plan at Medical major 1st Year - July Entry.

| Code | Title | |
|-----------------|--|--|
| Year 1 - Semest | er 2 | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| EGB113 | Energy in Engineering Systems | |
| OR | | |
| PVB101 | Physics of the Very | |

| | Large | |
|---|------------------------------|--|
| EGB123 | Civil Engineering Systems | |
| OR | | |
| Foundation Unit Option | | |
| Year 2 - Semester 1 | | |
| MZB126 | Engineering Computation | |
| EGB111 Foundation of Engineering Design | | |
| EGB121 Engineering Mechanics | | |
| EGB120 Foundations of Electrical Engineering | | |
| OR | | |
| Foundation Unit Option | | |

This is an example study plan for students on a relatively standard progression, however, depending on which units and second majors/minors you choose, you may need to deviate from that plan. Please contact sef.enguiry@gut.edu.au if you wish to discuss your study plan options.

Semesters

- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Year 5, Semester 1

| Code | Title | |
|-------------------------------------|--|--|
| Year 2, Semester 2 | | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB211 | Dynamics | |
| EGB242 | Signal Analysis | |
| 2nd Major/Minor Un | iit | |
| Year 3, Semester 1 | | |
| EGB220 | Mechatronics Design 1 | |
| EGB321 | Dynamics of Machines | |
| 2nd Major/Minor Unit | | |
| 2nd Major/Minor Un | iit | |
| Year 3, Semester 2 | | |
| EGB320 | Mechatronics Design 2 | |
| EGB345 | Control and Dynamic Systems | |
| Select one of: | | |
| EGH413 | Advanced Dynamics | |
| Intermediate Electrical Option Unit | | |
| Select one of: | | |
| EGH413 | Advanced Dynamics | |
| 2nd Major/Minor Unit | | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=EN01&courseID=32726. CRICOS No.00213J

Bachelor of Engineering (Honours) (Mechatronics)

| Year 4, Semester 1 | | |
|-------------------------------------|--|--|
| EGH404 | Research in Engineering Practice | |
| EGH419 | Mechatronics Design 3 | |
| EGH446 | Autonomous Systems | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 2 | | |
| EGH400-1 | Research Project 1 | |
| EGH445 | Modern Control | |
| 2nd Major/Minor Unit | | |
| Select one of: | | |
| EGH413 | Advanced Dynamics | |
| Intermediate Electrical Option Unit | | |
| 2nd Major/Minor Unit | | |
| Year 5, Semester 1 | | |
| EGH400-2 | Research Project 2 | |
| Advanced Electrical Option Unit | | |
| 2nd Major/Minor Unit | | |
| 2nd Major/Minor Unit | | |
| | | |

Study Area Description

For more details and description on this minor please refer to the EN01 Complementary Studies at the Faculty's Student Zone under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on statistical science (suggested pathway: MXB101, MXB107, MXB202, MXB242), mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- Unit List
- SUGGESTED PATHWAYS
- Statistical Science
- Mathematical and Statistical • Modelling
- **Applied Mathematics**
- Simulation Science
- Computation, modelling and simulation

| Unit List | |
|---|-----------------|
| Code | Title |
| Select 2 units (24 credit points) from Unit Option List 1: | |
| MXB101 | Probability and |

| Stochastic Modelling 1 |
|--|
| Introductory Computational Mathematics |
| Calculus of One and Two Variables |
| Linear Algebra and Differential Equations |
| Introduction to Statistical Modelling |
| credit points) from Unit |
| Advanced Calculus |
| Ordinary Differential Equations |
| Introduction to Operations Research |
| Probability and Stochastic Modelling 2 |
| Regression and Design |
| Modelling and |
| |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling |

| Applied Mathematics | |
|---------------------|--|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |

| MXB221 | Ordinary Differential Equations |
|--------------------|--|
| Simulation Science | ce |
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB106 | Linear Algebra and Differential Equations |
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |

| Computation, modelling and simulation | |
|---------------------------------------|--|
| Code | Title |
| MXB103 | Introductory Computational Mathematics |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB261 | Modelling and Simulation Science |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=EN01&courseID=32726. CRICOS No.00213J



| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Devakar Epari |
| obordinator | d.epari@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Medical) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified

timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- · Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

Sample Structure

| Code | Title |
|-----------------|--|
| Year 1 - Semest | er 1 |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours) (Medical)

| OR | |
|--|-------------------------------|
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 | Engineering Computation |
| Plus 36cp from ONE of the Engineering Foundation Strands | |

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
 Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 • Year 4, Semester 2

| Code | Title | |
|---------------------------|---|--|
| Year 2, Semeste | r 1 | |
| EGB211 | Dynamics | |
| EGB214 | Materials and Manufacturing | |
| EGB210 | Fundamentals of Mechanical Design | |
| LSB131 | Anatomy | |
| Year 2, Semeste | r 2 | |
| EGB314 | Strength of Materials | |
| LSB231 | Physiology | |
| 2nd Major/Minor | unit | |
| 2nd Major/Minor unit | | |
| Year 3, Semeste | r 1 | |
| EGB319 | BioDesign | |
| EGB323 | Fluid Mechanics | |
| EGH414 | Stress Analysis | |
| 2nd Major/Minor | unit | |
| Year 3, Semeste | r 2 | |
| EGH418 | Biomechanics | |
| EGH424 | Biofluids | |
| EGH404 | Research in Engineering Practice | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 1 | | |
| EGH438 | Biomaterials | |
| EGH400-1 | Research Project 1 | |
| 2nd Major/Minor | unit | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| | Modelling and Simulation for Medical | |
| EGH435 | Engineers | |
| EGH435 2nd Major/Minor | Engineers | |
| | Engineers unit | |

| Code | Title | |
|------------------------|--|--|
| Year 1, Semester 2 | | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| EGB113 | Energy in Engineering Systems | |
| OR | | |
| PVB101 | Physics of the Very Large | |
| EGB123 | Civil Engineering Systems | |
| OR | | |
| Foundation Unit Option | | |
| Voor 1. Compoter 1 | | |

| Year 1, Semester 1 | | |
|--------------------|-------------------------------------|--|
| MZB126 | Engineering Computation | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| LSB131 | Anatomy | |

Semesters

| ٠ | Year | 2, | Semester | 2 |
|---|------|----|----------|---|
| | | | | |

- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
 Year 5, Semester 1

| Code | Title | |
|----------------------|--|--|
| Year 2, Seme | ster 2 | |
| LSB231 | Physiology | |
| EGB120 | Foundations of Electrical Engineering | |
| Or Foundation | n Unit Option | |
| EGB211 | Dynamics | |
| 2nd Major/Mir | nor unit | |
| Year 3, Seme | ster 1 | |
| EGB210 | Fundamentals of Mechanical Design | |
| EGB214 | Materials and Manufacturing | |
| EGB323 | Fluid Mechanics | |
| 2nd Major/Minor unit | | |
| Year 3, Seme | ster 2 | |
| EGB314 | Strength of Materials | |
| EGH418 | Biomechanics | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 1 | | |
| EGB319 | BioDesign | |

| EGH404 | Research in Engineering Practice | |
|----------------------|--|--|
| EGH414 | Stress Analysis | |
| 2nd Major/Minor | unit | |
| Year 4, Semeste | r 2 | |
| EGH424 | Biofluids | |
| EGH435 | Modelling and Simulation for Medical Engineers | |
| EGH400-1 | Research Project 1 | |
| 2nd Major/Minor unit | | |
| Year 5, Semester 1 | | |
| EGH400-2 | Research Project 2 | |
| EGH438 | Biomaterials | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |

Study Area Description

For more details and description on this minor please refer to the EN01 **Complementary Studies** at the Faculty's Student Zone under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on statistical science (suggested pathway: MXB101, MXB107, MXB202, MXB242), mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- Unit List
- SUGGESTED PATHWAYS
- <u>Statistical Science</u>
- Mathematical and Statistical Modelling
- Applied Mathematics
- Simulation Science
- Computation, modelling and simulation

Unit List

| Code | Title | |
|--|--|--|
| Select 2 units (24 credit points) from Unit Option List 1: | | |
| MXB101 | Probability and Stochastic Modelling 1 | |
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and | |

Bachelor of Engineering (Honours) (Medical)

| | Differential Equations |
|--------------------------------------|--|
| MXB107 | Introduction to Statistical Modelling |
| Select 2 units (24 Option List 2: | credit points) from Unit |
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential Equations |
| MXB232 | Introduction to Operations Research |
| MXB241 | Probability and Stochastic Modelling 2 |
| MXB242 | Regression and Design |
| MXB261 | Modelling and Simulation Science |

| MXB106 | Linear Algebra and Differential Equations |
|--------|--|
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |

| Computation, modelling and simulation | | |
|---------------------------------------|--|--|
| Code | Title | |
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB221 | Ordinary Differential Equations | |
| MXB261 | Modelling and Simulation Science | |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling 2 |

| Applied Mathematics | |
|---------------------|---|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and Differential Equations |
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential Equations |

| Simulation Science | |
|--------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |



| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN01 |
| CRICOS | 084921G |
| Duration (full-time) | 4 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,000 per year full-time (96 credit points) |
| Total credit points | 384 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Thomas Rainey |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Professional Recognition

Full professional accreditation from Engineers Australia has been given for this course.

Complementary Studies

You will have the opportunity to undertaken either a 2nd major or two minors.

Special Course Requirements

A candidate for the degree of Bachelor of Engineering (Honours)(Process) must obtain at least 60 days of industrial experience/practice in an engineering environment as approved by the course coordinator.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)
- Complementary studies: one x second major or two x minor (96 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course

structure

To graduate with a Bachelor of Engineering (Honours), students are required to complete 384 credit points of course units, as outlined below:

- First year (96 credit points): four core units 48cp + one Maths option unit 12cp + foundation strand options 36cp (include two discipline foundation units 24cp + one option unit 12cp)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) Honours level units 96cp (192 credit points)
- Complementary Studies: 1 x 2nd major or 2 x minor (96 credit points)

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp

Sample Structure

| Code | Title |
|-----------------|--|
| Year 1 - Semest | er 1 |
| EGB100 | Engineering Sustainability and Professional Practice |
| EGB111 | Foundation of Engineering Design |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |



Bachelor of Engineering (Honours) (Process)

| OR | |
|--|-------------------------------|
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |
| MZB126 | Engineering Computation |
| Plus 36cp from ONE of the Engineering Foundation Strands | |

Semesters

- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2

| Code | Title | |
|----------------------|---|--|
| Year 2, Semeste | er 1 | |
| EGB261 | Unit Operations | |
| EGB262 | Process Principles | |
| EGB323 | Fluid Mechanics | |
| 2nd Major/Minor | Unit | |
| Year 2, Semeste | er 2 | |
| CVB101 | General Chemistry | |
| EGB322 | Thermodynamics | |
| 2nd Major/Minor | Unit | |
| 2nd Major/Minor | | |
| Year 3, Semeste | er 1 | |
| EGB361 | Minerals and Minerals Processing | |
| EGB362 | Operations Management and Process Economics | |
| 2nd Major/Minor | Unit | |
| 2nd Major/Minor | Unit | |
| Year 3, Semeste | er 2 | |
| EGB364 | Process Modelling | |
| EGH404 | Research in Engineering Practice | |
| EGH411 | Industrial Chemistry | |
| EGH422 | Advanced Thermodynamics | |
| Year 4, Semeste | er 1 | |
| EGH400-1 | Research Project 1 | |
| EGH463 | Plant and Process Design | |
| 2nd Major/Minor Unit | | |
| 2nd Major/Minor Unit | | |
| Year 4, Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH423 | Fluids Dynamics | |
| EGH462 | Process Control | |
| 2nd Major/Minor Unit | | |

If you intend to select the Civil Engineering Major, please refer your first year study plan at Civil major 1st

Year - July Entry.

OR

If you intend to select the Medical Engineering Major, please refer your first year study plan at Medical major 1st Year - July Entry.

| Code | Title | |
|-----------------|--|--|
| Year 1 - Semest | er 2 | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| EGB113 | Energy in Engineering Systems | |
| OR | | |
| PVB101 | Physics of the Very Large | |
| EGB123 | Civil Engineering Systems | |
| OR | | |
| Foundation Unit | • | |
| Year 2 - Semest | er 1 | |
| MZB126 | Engineering Computation | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| EGB120 | Foundations of Electrical Engineering | |
| OR | | |
| | | |

Foundation Unit Option

Semesters

- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 Year 4, Semester 2
- Year 5, Semester 1

| Code | Title |
|----------------------|------------------------------|
| Year 2, Semeste | r 2 |
| CVB101 | General Chemistry |
| 2nd Major/Minor Unit | |
| 2nd Major/Minor Unit | |
| 2nd Major/Minor Unit | |
| Year 3, Semester 1 | |
| EGB261 | Unit Operations |
| EGB262 | Process Principles |
| EGB323 | Fluid Mechanics |
| EGB362 | Operations Management and |

| | Process Economics | |
|----------------------|-------------------------------------|--|
| Year 3, Semester 2 | | |
| EGB322 | Thermodynamics | |
| EGB364 | Process Modelling | |
| EGH411 | Industrial Chemistry | |
| 2nd Major/Minor | Unit | |
| Year 4, Semeste | er 1 | |
| EGB361 | Minerals and Minerals Processing | |
| EGH404 | Research in Engineering Practice | |
| 2nd Major/Minor Unit | | |
| 2nd Major/Minor | Unit | |
| Year 4, Semeste | r 2 | |
| EGH400-1 | Research Project 1 | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |
| EGH462 | Process Control | |
| Year 5, Semester 1 | | |
| EGH400-2 | Research Project 2 | |
| EGH463 | Plant and Process Design | |
| 2nd Major/Minor Unit | | |
| 2nd Major/Minor Unit | | |

Study Area Description

For more details and description on this minor please refer to the EN01 **Complementary Studies** at the Faculty's Student Zone under "Your Course" page.

This minor offers a lot of flexibility. Depending on your area of interest you can choose units focusing on statistical science (suggested pathway: MXB101, MXB107, MXB202, MXB242), mathematical and statistical modelling (suggested pathway: MXB101, MXB105, MXB221, MXB241), applied mathematics (suggested pathway: MXB105, MXB106, MXB202, MXB221), simulation (suggested pathway: MXB101, MXB106, MXB232, MXB261), computation and modelling (suggested pathway: MXB103, MXB105, MXB221, MXB261).

In this list

- Unit List
- SUGGESTED PATHWAYS
- Statistical Science
- Mathematical and Statistical Modelling
- Applied Mathematics
- Simulation Science
- <u>Computation, modelling and</u> simulation

Unit List Code

Title Select 2 units (24 credit points) from Unit



Bachelor of Engineering (Honours) (Process)

| Option List 1: | | |
|---|--|--|
| MXB101 | Probability and Stochastic Modelling 1 | |
| MXB103 | Introductory Computational Mathematics | |
| MXB105 | Calculus of One and Two Variables | |
| MXB106 | Linear Algebra and Differential Equations | |
| MXB107 | Introduction to Statistical Modelling | |
| Select 2 units (24 credit points) from Unit Option List 2: | | |
| MXB202 | Advanced Calculus | |
| MXB221 | Ordinary Differential Equations | |
| MXB232 | Introduction to Operations Research | |
| MXB241 | Probability and Stochastic Modelling 2 | |
| MXB242 | Regression and Design | |
| MXB261 | Modelling and Simulation Science | |

SUGGESTED PATHWAYS Code Title

| Statistical Science | |
|---------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB107 | Introduction to Statistical Modelling |
| MXB202 | Advanced Calculus |
| MXB242 | Regression and Design |

| Mathematical and Statistical Modelling | |
|--|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB241 | Probability and Stochastic Modelling 2 |

| Applied Mathematics | |
|---------------------|-----------------------------------|
| Code | Title |
| MXB105 | Calculus of One and Two Variables |
| MXB106 | Linear Algebra and |

| | Differential Equations |
|--------------------|------------------------------------|
| MXB202 | Advanced Calculus |
| MXB221 | Ordinary Differential Equations |
| | |
| Simulation Science | |

| Simulation Science | |
|--------------------|--|
| Code | Title |
| MXB101 | Probability and Stochastic Modelling 1 |
| MXB106 | Linear Algebra and Differential Equations |
| MXB232 | Introduction to Operations Research |
| MXB261 | Modelling and Simulation Science |

| Computation, modelling and simulation | |
|---------------------------------------|--|
| Code | Title |
| MXB103 | Introductory Computational Mathematics |
| MXB105 | Calculus of One and Two Variables |
| MXB221 | Ordinary Differential Equations |
| MXB261 | Modelling and Simulation Science |

| Year | 2018 |
|-----------------------------------|---|
| QUT code | IN10 |
| CRICOS | 017323G |
| Duration (full-time) | 1 year |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$34,800 per year full-time (96 credit points) |
| Total credit points | 96 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Dimitri Perrin; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirements

A completed recognised bachelor degree in information technology or equivalent with a minimum grade point average of 4.5 (on QUT's 7-point scale), completed within the last 5 years.

International Entry requirements

Academic entry requirements

A completed recognised bachelor degree in information technology or equivalent with a minimum grade point average of 4.5 (on QUT's 7-point scale), completed within the last 5 years.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Overview

The Bachelor of Information Technology (Honours) allows you to further develop specific areas of expertise in information technology and related discipline areas and is a pathway into research higher degree study. You will develop high level skills in a specific discipline area and acquire research skills appropriate to your discipline. You will apply analystic processes involving abstraction and modelling to solve complex problems and / or develop new opportunities through the use of information technology and will apply a deep understanding of the discipline to accurately assess its impact on individuals, organisations and society. You will receive individual supervision from an experienced researcher to complete a project. This project allows you to demonstrate your advanced academic capability and culminates in the completion of an honours thesis.

Course Design

Requirements for the completion of IN10 Bachelor of Information Technology (Honours) are as follows:

CORE: Foundations of Research unit and Reviewing the Field unit

OPTION: A choice of either the *Expanded Research* Strand or the *Extended Coursework* Strand

Each strand comprises of coursework and a major research project supervised by QUT staff.

Career Outcomes

Information technology is an integral part of all commercial, industrial, government, social and personal activities. Graduates from the honours program have the opportunity to achieve the highest levels of their profession. Career opportunities include roles such as web developer, database manager, network administrator, electronic commerce developer, data communications specialist, software engineer, systems programmer, computer scientist, systems analyst or programmer. Additionally, graduates may evolve into domain experts working as chief technology officers, chief information officers, managers, executives, business analysts and entrepreneurs. Graduates of this degree may go into academic and research careers.

Professional Recognition

Graduates of the Bachelor of Information Technology (Honours) meet the knowledge requirement for admission to the Australian Computer Society (ACS).

Pathways to Further Study

The QUT Bachelor of Information Technology (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible to apply to the Doctor of Philosophy within the Science and Engineering Faculty.

Domestic Course structure

You'll need to choose between either the expanded research or extended coursework options.

International Course

structure

You'll need to choose between either the expanded research or extended coursework options.

Sample Structure Semesters

- Semester 1
- <u>Semester 2</u>
- Information Technology Honours
 <u>Unit Options (Expanded Research)</u>



Bachelor of Information Technology (Honours)

| Code | Title |
|--|---|
| Semester 1 | |
| SEB400 | Foundations of Research |
| SEB402 | Project Proposal |
| SEB403-1 | Honours Research Project-1 |
| SEB410 | Advanced Topic 1 |
| (SEB410 or sele Information Tec Options) | ect 1 unit from hnology Honours Unit |
| Semester 2 | |
| SEB411 | Advanced Topic 2 |
| | ect 12cp (1 Unit) from hnology Honours Unit |
| SEB403-2 | Honours Research Project-2 |
| SEB403-3 | Honours Research Project-3 |
| SEB403-4 | Honours Research Project-4 |
| Options (Expan | |
| Select 24cp (2 u | • |
| IAB450 | Enterprise Systems Management |
| IAB451 | Business in the Cloud |
| IFN515 | Fundamentals of Business Process Management |
| IFN611 | Information Retrieval |
| IFN612 | Emerging Technologies for Information Practice |
| IFN641 | Advanced Network Management |
| IFN643 | Computer System Security |
| IFN645 | Data Mining Technology and Applications |
| IFN652 | Enterprise Business Process Management |
| IFN660 | Programming Language Theory |
| IFN661 | Mobile and Pervasive Systems |
| IFN662 | Enterprise Systems and Applications |
| IFN680 | Advanced Topics in Artificial Intelligence |
| IFN690 | Advanced User Centred Design |
| IGB321 | Immersive Game Level Design |
| IGB381 | Game Engine Technology |
| IGB383 | AI for Games |

| SEB410 | Advanced Topic 1 | |
|---|------------------|--|
| SEB411 | Advanced Topic 2 | |
| PLEASE NOTE: The following units which have been discontinued will also count as IT Honours Unit Options: | | |
| INN282 Games Level Design (disc 31/12/2016) | | |
| | | |

Semesters

- <u>Semester 1</u>
- <u>Semester 2</u>
- Information Technology Honours
 Unit Options (Extended
 Coursework)

| Code | Title |
|------------------|---|
| Semester 1 | |
| SEB400 | Foundations of Research |
| SEB410 | Advanced Topic 1 |
| SEB411 | Advanced Topic 2 |
| SEB412 | Advanced Topic 3 |
| OR | |
| | Jnits) from Information nours Unit Options |
| Semester 2 | |
| SEB404-1 | Honours Research Project-1 |
| SEB404-2 | Honours Research Project-2 |
| SEB404-3 | Honours Research Project-3 |
| SEB413 | Advanced Topic 4 |
| | hnology Honours Unit led Coursework) |
| Select 36cp (3 u | inits) from: |
| IAB450 | Enterprise Systems Management |
| IAB451 | Business in the Cloud |
| IFN515 | Fundamentals of Business Process Management |
| IFN611 | Information Retrieval |
| IFN612 | Emerging Technologies for Information Practice |
| IFN641 | Advanced Network Management |
| IFN643 | Computer System Security |
| IFN645 | Data Mining Technology and Applications |
| IFN652 | Enterprise Business Process Management |
| IFN660 | Programming Language Theory |
| IFN661 | Mobile and Pervasive Systems |
| IFN662 | Enterprise Systems and |

Applications Advanced Topics in IFN680 Artificial Intelligence Advanced User Centred IFN690 Design Immersive Game Level IGB321 Design Game Engine IGB381 Technology IGB383 AI for Games **SEB410** Advanced Topic 1 **SEB411** Advanced Topic 2 **SEB412** Advanced Topic 3 PLEASE NOTE: The following units which have been discontinued will also count as IT Honours Unit Options: INN282 Games Level Design (disc 31/12/2016)



| Year | 2018 |
|-----------------------------------|--|
| QUT code | IX59 |
| CRICOS | 084925D |
| Duration (full-time) | 5 years |
| OP | 9 |
| Rank | 81 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$10,200 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$31,900 per year full-time (96 credit points) |
| Total credit points | 480 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Discipline Coordinator | +61 7 3138 2050; +61 7 3138 8822 bus@qut.edu.au; sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: Chemistry, Maths C, Physics

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: Chemistry, Maths C, Physics

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours) in IX59, students are required to complete 288 credit points of course units, as outlined below:

- First year: Four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp

To complete the Bachelor of Business students will complete 192 credit points of course units, as outlined below:

- eight Business School core units (96 credit points) *
- · eight major core units (96 credit points)

*Accounting major students complete six business core units and 10 accountancy major units to allow them to complete professional requirements.

International Course structure

To graduate with a Bachelor of Engineering (Honours) in IX59, students are required to complete 288 credit points of course units, as outlined below:

- First year: Four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: One (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points)

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp

To complete the Bachelor of Business students will complete 192 credit points of course units, as outlined below:

- eight Business School core units (96 credit points) *
- · eight major core units (96 credit points)

*Accounting major students complete six business core units and 10 accountancy major units to allow them to complete professional requirements.

Sample Structure Semesters

- Semester 1 (February)
- commencements Year 1 - Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 •
- Year 2 Semester 2 .
- Year 3 Semester 1 •
- Year 3 Semester 2 •
- Year 4 Semester 1
- Year 4 Semester 2 ٠
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title | |
|-------------------------------------|--|--|
| Semester 1 (February) commencements | | |
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational | |

| | Explorations |
|-----------------|--|
| Year 1 - Semest | ter 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | ter 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | ter 2 |
| EGB120 | Foundations of Electrical Engineering |
| Foundation Unit | |
| Year 3 - Semest | ter 1 |
| EGB261 | Unit Operations |
| EGB323 | Fluid Mechanics |
| Year 3 - Semest | ter 2 |
| CVB101 | General Chemistry |
| EGB322 | Thermodynamics |
| Year 4 - Semest | |
| EGB262 | Process Principles |
| EGB362 | Operations Management and Process Economics |
| Year 4 - Semest | ter 2 |
| EGB364 | Process Modelling |
| EGH411 | Industrial Chemistry |
| Year 5 - Semest | ter 1 |
| EGB361 | Minerals and Minerals Processing |
| EGH400-1 | Research Project 1 |
| EGH404 | Research in Engineering Practice |
| EGH463 | Plant and Process Design |
| Year 5 - Semest | ter 2 |
| EGH400-2 | Research Project 2 |
| EGH422 | Advanced Thermodynamics |
| EGH423 | Fluids Dynamics |
| EGH462 | Process Control |
| Semesters | |

So

| Semesters |
|---|
| Semester 1 (February) |
| commencements |
| Year 1 - Semester 1 |
| Year 1 - Semester 2 |
| Year 2 - Semester 1 |
| Year 2 - Semester 2 |
| Year 3 - Semester 1 |
| Year 3 - Semester 2 |
| Year 4, Semester 1 |
| Year 4 - Semester 2 |
| Year 5 - Semester 1 |
| Year 5 - Semester 2 |
| |
| Code Title |

| | oruary) commencements |
|-----------------|--|
| Year 1 - Semest | er 1 |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | Mathematics |
| OK | Computational |
| MXB161 | Explorations |
| Year 1 - Semest | |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | er 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | |
| | Civil Engineering |
| EGB123 | Systems |
| Foundation Unit | Option |
| Year 3 - Semest | er 1 |
| EGB270 | Civil Engineering Materials |
| EGB272 | Traffic and Transport Engineering |
| Year 3 - Semest | er 2 |
| EGB273 | Principles of Construction |
| EGB373 | Geotechnical Engineering |
| Year 4, Semeste | er 1 |
| EGB275 | Structural Mechanics |
| EGB371 | Engineering Hydraulics |
| Year 4 - Semest | er 2 |
| EGB376 | Steel Design |
| EGH471 | Advanced Water |
| | Engineering |
| Year 5 - Semest | |
| EGB375 | Design of Concrete Structures |
| EGH400-1 | Research Project 1 |
| EGH404 | Research in Engineering Practice |
| EGH473 | Advanced Geotechnical Engineering |
| Year 5 - Semest | er 2 |
| EGH400-2 | Research Project 2 |
| EGH472 | Advanced Highway and Pavement Engineering |
| EGH475 | Advanced Concrete Structures |
| EGH479 | Advances in Civil Engineering Practice |
| | |

Semesters

| Semesters | | | |
|---|----------------------------------|--|--|
| Semester 1 | | | |
| <u>commence</u> <u>Year 1 - Se</u> | | | |
| Year 1 - Se | mester 2 | | |
| Year 2 - Se | mester 1 | | |
| Year 2 - Se Year 3 - Se | mester 2 | | |
| • <u>Year 3 - Se</u> | | | |
| Year 4 - Se | mester 1 | | |
| • <u>Year 4 - Se</u> | mester 2 | | |
| Year 5 - Se Year 5 - Se | mester 1 | | |
| Code | Title | | |
| | oruary) commencements | | |
| Year 1 - Semest | | | |
| | | | |
| EGB113 | Energy in Engineering Systems | | |
| M7D405 | Introductory | | |
| MZB125 | Engineering Mathematics | | |
| OR | mauremanos | | |
| | Computational | | |
| MXB161 | Explorations | | |
| Year 1 - Semest | • | | |
| | Engineering | | |
| EGB100 | Sustainability and | | |
| | Professional Practice | | |
| MZB126 | Engineering Computation | | |
| Year 2 - Semest | - | | |
| | Foundation of | | |
| EGB111 | Engineering Design | | |
| EGB121 | Engineering Mechanics | | |
| Year 2 - Semest | er 2 | | |
| EGB120 | Foundations of | | |
| | Electrical Engineering | | |
| Foundation Unit | Option | | |
| Year 3 - Semest | er 1 | | |
| CAB202 | Microprocessors and | | |
| | Digital Systems | | |
| EGB242 | Signal Analysis | | |
| Year 3 - Semest | | | |
| CAB201 | Programming Principles | | |
| Intermediate Electrical Option Unit | | | |
| Year 4 - Semester 1 | | | |
| EGB240 | Electronic Design | | |
| Intermediate Sof | tware Option Unit | | |
| | Year 4 - Semester 2 | | |
| CAB403 | Systems Programming | | |
| Intermediate Electrical or Software Option Unit | | | |
| Year 5 - Semester 1 | | | |
| | Research in | | |
| EGH404 | Engineering Practice | | |
| EGH400-1 | Research Project 1 | | |
| Advanced Electr | ical or Software Option | | |
| | | | |



| Unit | |
|---------------------------------|----------------------------|
| EGH456 | Embedded Systems |
| Year 5 - Semester 2 | |
| EGH400-2 | Research Project 2 |
| EGH455 | Advanced Systems Design |
| Advanced Electrical Option Unit | |
| Advanced Software Option Unit | |

Semesters

- Semester 1 (February)
- commencements
- Year 1 Semester 1 Year 1 Semester 2 .
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 - Semester 1
- Year 3 Semester 2 ٠
- Year 4 - Semester 1
- Year 4 Semester 2
- Year 5 Semester 1 Year 5 Semester 2 ٠
- .

| Code | Title |
|---|---|
| Semester 1 (F | ebruary) commencements |
| Year 1 - Seme | ester 1 |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Seme | ester 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Seme | ester 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Seme | ester 2 |
| CAB202 | Microprocessors and Digital Systems |
| EGB120 | Foundations of Electrical Engineering |
| Year 3 - Seme | ester 1 |
| EGB240 | Electronic Design |
| EGB241 | Electromagnetics and Machines |
| Year 3 - Seme | ester 2 |
| EGB242 | Signal Analysis |
| Intermediate Electrical Option Unit (1) | |
| EGB348 can be selected from the list. A requisite waiver for this unit will be granted if you are enrolled in EGB242 at the same time . | |
| Year 4 - Seme | ester 1 |
| EGB340 | Design and Practice |

| Foundation Unit Option | | |
|---|-------------------------------------|--|
| Year 4 - Semester 2 | | |
| Intermediate Electrical Option Unit (2) | | |
| Intermediate Electrical Option Unit (3) | | |
| Year 5 - Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| Advanced Electrical Option Unit (1) | | |
| Advanced Electrical Option Unit (2) | | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| Advanced Electrical Option Unit (3) | | |
| Advanced Electrical Option Unit (4) | | |
| Advanced Electrical Option Unit (5) | | |
| | | |

Semesters

- Semester 1 (February) commencements . Year 1 - Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1 ٠ .
- Year 3 Semester 2 • Year 4 - Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
 Year 5 Semester 2

| Code | Title | |
|------------------------|--|--|
| Semester 1 (Feb | oruary) commencements | |
| Year 1 - Semest | er 1 | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semester 1 | | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | er 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit Option | | |
| Year 3 - Semester 1 | | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB240 | Electronic Design | |
| Year 3 - Semester 2 | | |

| EGB242 | Signal Analysis | |
|--|--|--|
| Intermediate Ele | ctrical Option Unit | |
| Year 4 - Semester 1 | | |
| EGB243 | Aircraft Systems and Flight | |
| EGB349 | Systems Engineering and Design Project | |
| Year 4 - Semest | er 2 | |
| EGB345 | Control and Dynamic Systems | |
| EGB346 | Unmanned Aircraft Systems | |
| Year 5 - Semester 1 | | |
| Year 5 - Semest | er 1 | |
| Year 5 - Semest EGH400-1 | er 1 Research Project 1 | |
| | | |
| EGH400-1 | Research Project 1 Research in | |
| EGH400-1 EGH404 | Research Project 1 Research in Engineering Practice Autonomous Systems | |
| EGH400-1 EGH404 EGH446 | Research Project 1 Research in Engineering Practice Autonomous Systems rical Option Unit | |
| EGH400-1 EGH404 EGH446 Advanced Electr | Research Project 1 Research in Engineering Practice Autonomous Systems rical Option Unit | |
| EGH400-1 EGH404 EGH446 Advanced Electr Year 5 - Semest | Research Project 1 Research in Engineering Practice Autonomous Systems ical Option Unit er 2 | |
| EGH400-1 EGH404 EGH446 Advanced Electr Year 5 - Semest EGH400-2 | Research Project 1 Research in Engineering Practice Autonomous Systems rical Option Unit er 2 Research Project 2 | |

Semesters

- Semester 1 (February)
 - commencements
- Year 1 Semester 1 • Year 1 - Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- •
- Year 3 Semester 2 Year 4 Semester 1 .
- Year 4 Semester 2 •
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title | |
|-------------------------------------|--|--|
| Semester 1 (February) commencements | | |
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semester 1 | | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |

QU

| Year 2 - Semest | ter 2 | |
|---------------------|--|--|
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit | Option | |
| Year 3 - Semest | ter 1 | |
| EGB210 | Fundamentals of Mechanical Design | |
| EGB214 | Materials and Manufacturing | |
| Year 3 - Semest | ter 2 | |
| EGB211 | Dynamics | |
| EGB314 | Strength of Materials | |
| Year 4 - Semest | ter 1 | |
| EGB321 | Dynamics of Machines | |
| EGB323 | Fluid Mechanics | |
| Year 4 - Semest | ter 2 | |
| EGB322 | Thermodynamics | |
| EGH404 | Research in Engineering Practice | |
| Year 5 - Semest | ter 1 | |
| EGB316 | Design of Machine Elements | |
| EGH400-1 | Research Project 1 | |
| EGH414 | Stress Analysis | |
| EGH421 | Vibration and Control | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH420 | Mechanical Systems Design | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |

Semesters

- Semester 1 (February)
- commencements
- Year 1 Semester 1
 Year 1 Semester 2
- Year 2 Semester 1 •
- Year 2 Semester 2
- Year 3 Semester 1
 Year 3 Semester 2
- Year 4 Semester 1 •
- Year 4 - Semester 2
- Year 5 - Semester 1
- Year 5 Semester 2 •

| Code | Title |
|-------------------------------------|--|
| Semester 1 (February) commencements | |
| Year 1 - Semester 1 | |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semester 2 | |

| EGB100 | Engineering Sustainability and Professional Practice |
|---------------------------------|--|
| MZB126 | Engineering Computation |
| Year 2 - Semest | er 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | er 2 |
| EGB120 | Foundations of Electrical Engineering |
| Foundation Unit | Option |
| Year 3 - Semest | er 1 |
| EGB211 | Dynamics |
| EGB242 | Signal Analysis |
| Year 3 - Semest | er 2 |
| CAB202 | Microprocessors and Digital Systems |
| EGB345 | Control and Dynamic Systems |
| Year 4 - Semest | er 1 |
| EGB220 | Mechatronics Design 1 |
| EGB321 | Dynamics of Machines |
| Year 4 - Semest | er 2 |
| EGB320 | Mechatronics Design 2 |
| | ectrical Option Unit |
| Year 5 - Semest | er 1 |
| EGH400-1 | Research Project 1 |
| EGH404 | Research in Engineering Practice |
| EGH419 | Mechatronics Design 3 |
| EGH446 | Autonomous Systems |
| Year 5 - Semest | er 2 |
| EGH400-2 | Research Project 2 |
| EGH413 | Advanced Dynamics |
| EGH445 | Modern Control |
| Advanced Electrical Option Unit | |
| | |

Semesters

| ٠ | Semester 1 | (February) |
|---|------------|------------|
| | | |

- commencements Year 1 - Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 ٠
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1 Year 4 - Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title |
|-------------------------------------|----------------------------------|
| Semester 1 (February) commencements | |
| Year 1 - Semester 1 | |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory |

| | Engineering Mathematics |
|---------------------------|--|
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semest | |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | er 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | |
| EGB120 | Foundations of Electrical Engineering |
| Foundation Unit | • |
| Year 3 - Semest | |
| EGB210 | Fundamentals of Mechanical Design |
| LSB131 | Anatomy |
| Year 3 - Semest | |
| EGB211 | Dynamics |
| LSB231 | Physiology |
| Year 4 - Semest | |
| EGB214 | Materials and Manufacturing |
| EGB323 | Fluid Mechanics |
| Year 4 - Semest | |
| EGB314 | Strength of Materials |
| EGH404 | Research in Engineering Practice |
| Year 5 - Semest | |
| EGB319 | BioDesign |
| EGH400-1 | Research Project 1 |
| EGH414 | Stress Analysis |
| EGH418 Year 5 - Semest | Biomechanics |
| EGH400-2 | Research Project 2 |
| EGH424 | Biofluids |
| | Modelling and |
| EGH435 | Simulation for Medical Engineers |
| EGH438 | Biomaterials |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2 ٠
- Year 3 Semester 1 Year 3 Semester 2 ٠
- •
- Year 4 Semester 1 •

Title

Year 4 Semester 2

Code



| Year 1 Semester 1 | |
|-------------------|---|
| BSB110 | Accounting |
| BSB115 | Management |
| Year 1 Semester 2 | |
| BSB111 | Business Law and Ethics |
| BSB126 | Marketing |
| Year 2 Semester 1 | |
| AYB200 | Financial Accounting |
| AYB225 | Management Accounting |
| Year 2 Semester 2 | |
| AYB221 | Accounting Systems and Technologies |
| BSB113 | Economics |
| Year 3 Semester 1 | |
| EFB210 | Finance 1 |
| BSB399 | Real World Ready - Business Capstone |
| Year 3 Semester 2 | |
| AYB321 | Strategic Management Accounting |
| AYB340 | Company Accounting |
| Year 4 Semester 1 | |
| AYB219 | Taxation Law |
| AYB230 | Corporations Law |
| Year 4 Semester 2 | |
| AYB301 | Audit and Assurance |
| AYB311 | Financial Accounting Issues |

Semesters

- Semester 1 (February)
- <u>commencement</u>
- Year 1 Semester 1
- Year 1 Semester 2 •
- Year 2 Semester 1 Year 2 Semester 2 ٠
- Year 3 Semester 1 •
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Semester 2 (July) commencement ٠
- Year 1, Semester 2
- Year 2, Semester 1 ٠
- Year 2, Semester 2 Year 3, Semester 1 •
- .
- Year 3, Semester 2 •
- Year 4, Semester 1 ٠ •
- Year 4, Semester 2 Year 5, Semester 1
- .

| Code | Title |
|------------------------------------|-----------|
| Semester 1 (February) commencement | |
| Year 1 Semester 1 | |
| BSB113 | Economics |
| BSB126 | Marketing |
| Year 1 Semester 2 | |

| BSB110 | Accounting |
|--|---|
| BSB115 | Management |
| Year 2 Semester 1 | |
| AMB220 | Advertising Theory and Practice |
| MGB227 | Entrepreneurship |
| Year 2 Semester 2 | |
| AMB200 | Consumer Behaviour |
| AMB201 | Marketing and Audience Research |
| Year 3 Semester 1 | |
| BSB111 | Business Law and |
| BSB119 | Ethics Global Business |
| Year 3 Semester 2 | |
| AMB318 | Advertising Copywriting |
| AMB319 | Media Planning |
| Year 4 Semester 1 | |
| AMB320 | Advertising Management |
| AMB330 | Digital Portfolio |
| Year 4 Semester 2 | |
| | Advertising |
| AMB339 | Campaigns |
| BSB399 | Real World Ready - Business Capstone |
| | |
| Semester 2 (July) | |
| Semester 2 (July) of Year 1, Semester 2 | |
| | |
| Year 1, Semester 2 | 2 |
| Year 1, Semester 2 BSB126 | 2 Marketing Economics |
| Year 1, Semester 2 BSB126 BSB113 | 2 Marketing Economics |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 | 2 Marketing Economics |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 | 2 Marketing Economics Accounting Management |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 | 2 Marketing Economics Accounting Management |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 | 2 Marketing Economics Accounting Management |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 | 2 Marketing Economics Accounting Management Management Global Business Advertising Theory and Practice |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 | 2 Marketing Economics Accounting Management Management Global Business Advertising Theory and Practice |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 | 2 Marketing Economics Accounting Management Global Business Advertising Theory and Practice Marketing and |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 | Accounting Accounting Management Management Global Business Advertising Theory and Practice Marketing and Audience Research Consumer Behaviour |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 AMB200 | Accounting Accounting Management Management Global Business Advertising Theory and Practice Marketing and Audience Research Consumer Behaviour |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 AMB200 Year 3, Semester 2 | Marketing Economics Economics Accounting Management Management Global Business Advertising Theory and Practice Marketing and Audience Research Consumer Behaviour |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 AMB200 Year 3, Semester 2 AMB318 | AdvertisingMarketingEconomicsAccountingManagementManagementGlobal BusinessAdvertising Theory and PracticeMarketing and Audience ResearchConsumer BehaviourAdvertising CopywritingMarketing and Audience ResearchMarketing and Audience Research <trt< td=""></trt<> |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 AMB200 Year 3, Semester 2 AMB318 AMB319 | Marketing Economics Accounting Management Management Global Business Advertising Theory and Practice Marketing and Audience Research Consumer Behaviour Advertising Copywriting Media Planning |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 AMB200 Year 3, Semester 2 AMB318 AMB319 Year 4, Semester 7 | Accounting Accounting Management Accounting Management Global Business Advertising Theory and Practice Marketing and Advertising and Audience Research Consumer Behaviour Advertising Copywriting Media Planning |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 AMB200 Year 3, Semester 2 AMB318 AMB319 Year 4, Semester 7 AMB320 AMB320 | AdvertisingMarketingEconomicsAccountingManagementManagementGlobal BusinessAdvertising Theory and PracticeMarketing and Audience ResearchConsumer BehaviourAdvertising CopywritingMadia PlanningAdvertising ManagementDigital Portfolio |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 Year 3, Semester 2 AMB318 AMB318 AMB319 Year 4, Semester 7 AMB320 | MarketingMarketingEconomicsAccountingManagementManagementGlobal BusinessAdvertising Theory and PracticeMarketing and Audience ResearchConsumer BehaviourAdvertising CopywritingMedia PlanningAdvertising ManagementDigital PortfolioAdvertising Advertising |
| Year 1, Semester 2 BSB126 BSB113 Year 2, Semester 7 BSB110 BSB115 Year 2, Semester 2 BSB119 AMB220 Year 3, Semester 7 AMB201 Year 3, Semester 2 AMB318 AMB318 AMB319 Year 4, Semester 7 AMB320 AMB320 | MarketingMarketingEconomicsAccountingManagementManagementGlobal BusinessAdvertising Theory and PracticeMarketing and Audience ResearchConsumer BehaviourAdvertising CopywritingMedia PlanningAdvertising ManagementDigital Portfolio |

| | Ethics |
|--------------------|---|
| Year 5, Semester 1 | |
| MGB227 | Entrepreneurship |
| BSB399 | Real World Ready - Business Capstone |

Semesters

- Semester 1 (February) commencement
 - Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2 •
- Year 4 Semester 1
- Year 4 Semester 2
- ٠ Semester 2 (February) commencement
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1 .
- Year 3, Semester 2
- Year 4, Semester 1 .
- •
- Year 4, Semester 2 Year 5, Semester 1 .
- Applied Economics Unit Options •
- Quantitative Economics Unit **Options**

| Code | Title | |
|---|--------------------------------|--|
| Semester 1 (Febr | ruary) commencement | |
| Year 1 Semester | 1 | |
| BSB113 | Economics | |
| BSB115 | Management | |
| Year 1 Semester | 2 | |
| BSB110 | Accounting | |
| EFB223 | Economics 2 | |
| Year 2 Semester | 1 | |
| EFB330 | Intermediate Macroeconomics | |
| EFB331 | Intermediate Microeconomics | |
| Year 2 Semester | 2 | |
| BSB111 | Business Law and Ethics | |
| Choose an elective from the Applied Economics or Quantitative Economics Unit Option lists | | |
| Year 3 Semester | 1 | |
| MGB227 | Entrepreneurship | |
| Choose an elective from the Applied Economics or Quantitative Economics Unit Option lists | | |
| Year 3 Semester | 2 | |
| BSB119 | Global Business | |
| Choose an elective from the Applied Economics or Quantitative Economics Unit Option lists | | |
| Year 4 Semester 1 | | |
| BSB399 | Real World Ready - | |



Business Capstone Choose an elective from the Applied Economics or Quantitative Economics Unit Option lists

| Year 4 Semester | | | |
|---|--|--|--|
| | Contemporary | | |
| EFB338 | Application of Economic Theory | | |
| BSB126 | - | | |
| | Marketing | | |
| | ruary) commencement | | |
| Year 1, Semester | | | |
| BSB113 | Economics | | |
| BSB115 | Management | | |
| Year 2, Semester | | | |
| BSB110 | Accounting | | |
| EFB223 | Economics 2 | | |
| Year 2, Semester | 2 | | |
| EFB330 | Intermediate | | |
| 21 2000 | Macroeconomics | | |
| EFB331 | Intermediate | | |
| | Microeconomics | | |
| Year 3, Semester | | | |
| BSB111 | Business Law and | | |
| - | Ethics | | |
| Economics Optio | | | |
| Year 3, Semester | 1 | | |
| MGB227 | Entrepreneurship | | |
| Economics Optio | | | |
| Year 4, Semester | r 1 | | |
| BSB119 | Global Business | | |
| Economics Optio | n Unit | | |
| Year 4, Semester | r 2 | | |
| | | | |
| | Contemporary | | |
| EFB338 | Contemporary Application of | | |
| | Contemporary Application of Economic Theory | | |
| EFB338 Economics Optio | Contemporary Application of Economic Theory | | |
| | Contemporary Application of Economic Theory n Unit | | |
| Economics Optio | Contemporary Application of Economic Theory n Unit | | |
| Economics Optio Year 5, Semester BSB126 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - | | |
| Economics Optio Year 5, Semester BSB126 BSB399 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options | | |
| Economics Optio Year 5, Semester BSB126 BSB399 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 | Contemporary Application of Economic Theory I Unit Marketing Real World Ready - Business Capstone Conomics Capstone Financial Markets Economics for the Real World Environmental Economics and Policy International Economics | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics Somics Unit Options Introduction to Applied | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 Quantitative Econ | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics Introduction to Applied Econometrics | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 Quantitative Econ | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone CS Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics Introduction to Applied Econometrics Applied Behavioural | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 Quantitative Econ EFB222 EFB332 | Contemporary Application of Economic Theory In Unit I Marketing Real World Ready - Business Capstone Source Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics Introduction to Applied Econometrics Applied Behavioural Economics | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 Quantitative Econ EFB222 | Contemporary Application of Economic Theory n Unit 1 Marketing Real World Ready - Business Capstone cs Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics Introduction to Applied Econometrics Applied Behavioural Economics | | |
| Economics Optio Year 5, Semester BSB126 BSB399 Applied Economi EFB201 EFB225 EFB226 EFB336 Quantitative Econ EFB222 EFB332 | Contemporary Application of Economic Theory In Unit I Marketing Real World Ready - Business Capstone Source Unit Options Financial Markets Economics for the Real World Environmental Economics and Policy International Economics Introduction to Applied Econometrics Applied Behavioural Economics | | |

- Semester 1 (February) commencement
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 Year 2 Semester 2
- ٠ Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Semester 2 (July) commencement
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 Year 4, Semester 2
- Year 5, Semester 1

| <u>rear 5, bemester 1</u> | | |
|---------------------------|---|--|
| Code | Title | |
| Semester 1 (Febru | ary) commencement | |
| Year 1 Semester 1 | | |
| BSB113 | Economics | |
| BSB115 | Management | |
| Year 1 Semester 2 | | |
| EFB223 | Economics 2 | |
| BSB126 | Marketing | |
| Year 2 Semester 1 | | |
| BSB110 | Accounting | |
| MGB227 | Entrepreneurship | |
| Year 2 Semester 2 | | |
| EFB201 | Financial Markets | |
| EFB210 | Finance 1 | |
| Year 3 Semester 1 | | |
| BSB111 | Business Law and Ethics | |
| EFB335 | Investments | |
| Year 3 Semester 2 | | |
| EFB343 | Corporate Finance | |
| EFB344 | Risk Management and Derivatives | |
| Year 4 Semester 1 | | |
| BSB399 | Real World Ready - Business Capstone | |
| EFB312 | International Finance | |
| Year 4 Semester 2 | | |
| BSB119 | Global Business | |
| EFB360 | Finance Capstone | |
| Semester 2 (July) of | commencement | |
| Year 1, Semester 2 | 2 | |
| BSB113 | Economics | |
| BSB115 | Management | |
| Year 2, Semester 1 | | |
| EFB223 | Economics 2 | |
| BSB126 | Marketing | |
| Year 2, Semester 2 | 2 | |
| BSB110 | Accounting | |

| MGB227 | Entrepreneurship | |
|--------------------|---|--|
| Year 3, Semester 7 | 1 | |
| EFB201 | Financial Markets | |
| EFB210 | Finance 1 | |
| Year 3, Semester 2 | | |
| BSB111 | Business Law and Ethics | |
| EFB335 | Investments | |
| Year 4, Semester 1 | | |
| EFB343 | Corporate Finance | |
| EFB344 | Risk Management and Derivatives | |
| Year 4, Semester 2 | 2 | |
| BSB399 | Real World Ready - Business Capstone | |
| EFB312 | International Finance | |
| Year 5, Semester 1 | | |
| BSB119 | Global Business | |
| EFB360 | Finance Capstone | |

Semesters

| ٠ | Semester 1 | (February) |
|--------------|------------|------------|
| commencement | | |

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
 Year 2 Semester 2
- Year 3 Semester 1 Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Semester 2 (July) commencement

| Code | Title | |
|-------------------|---|--|
| Semester 1 (Febr | uary) commencement | |
| Year 1 Semester | 1 | |
| BSB113 | Economics | |
| BSB115 | Management | |
| Year 1 Semester 2 | 2 | |
| BSB111 | Business Law and Ethics | |
| BSB119 | Global Business | |
| Year 2 Semester | 1 | |
| MGB227 | Entrepreneurship | |
| MGB200 | Managing People | |
| Year 2 Semester 2 | 2 | |
| MGB207 | Human Resource Issues and Strategy | |
| BSB110 | Accounting | |
| Year 3 Semester | 1 | |
| MGB220 | Human Resource Decision Making | |
| MGB331 | Learning and Development in Organisations | |
| Year 3 Semester 2 | | |
| MGB201 | Contemporary Employment Relations | |



| BSB126 | Marketing |
|-------------------|---|
| Year 4 Semester | 1 |
| BSB399 | Real World Ready - Business Capstone |
| MGB339 | Performance and Reward |
| Year 4 Semester | 2 |
| MGB320 | Recruitment and Selection |
| MGB370 | Personal and Professional Development |
| Semester 2 (July) | commencement |
| Course Notes | |

Semesters

• Semester 1 (February) commencement Year 1 Semester 1 Year 1 Semester 2
 Year 2 Semester 1 Year 2 Semester 2 Year 3 Semester 1 Year 3 Semester 2 Year 4 Semester 1 ٠ Year 4 Semester 2 ٠ Semester 2 (July) commencement Year 1, Semester 2 Year 2, Semester 1 Year 2, Semester 2 ٠ ٠ ٠ Year 3, Semester 1 Year 3, Semester 2 ٠ Year 4, Semester 1 Year 4, Semester 2 ٠ ٠ • Year 5, Semester 1

| Code | Title |
|------------------------------------|--|
| Semester 1 (February) commencement | |
| Year 1 Semeste | r 1 |
| BSB119 | Global Business |
| BSB126 | Marketing |
| Year 1 Semester 2 | |
| BSB110 | Accounting |
| BSB115 | Management |
| Year 2 Semester 1 | |
| BSB113 | Economics |
| MGB225 | Intercultural Communication and Negotiation Skills |
| Year 2 Semester 2 | |
| BSB111 | Business Law and |

| | Ethics |
|---|--|
| MGB227 | Entrepreneurship |
| Year 3 Semeste | r 1 |
| MGB340 | International Business in the Asia-Pacific |
| AYB227 | International Accounting |
| Year 3 Semeste | |
| AMB210 | Importing and Exporting |
| EFB240 | Finance for International Business |
| Year 4 Semeste | |
| AMB303 | International Logistics |
| AMB336 | International Marketing |
| Year 4 Semeste | r 2 International Business |
| AMB369 | Strategy |
| BSB399 | Real World Ready - Business Capstone |
| | /) commencement |
| Year 1, Semeste | |
| BSB119 | Global Business |
| BSB126 | Marketing |
| Year 2, Semeste BSB110 | Accounting |
| BSB115 | Management |
| | |
| | - |
| Year 2, Semeste | er 2 |
| | er 2 Economics |
| Year 2, Semeste BSB113 MGB227 | er 2 Economics Entrepreneurship |
| Year 2, Semeste BSB113 | er 2 Economics Entrepreneurship |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste | er 2 Economics Entrepreneurship er 1 International |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business er 1 |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business er 1 International Logistics |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 AMB336 | er 2 Economics Entrepreneurship r 1 International Accounting Intercultural Communication and Negotiation Skills r 2 Importing and Exporting Finance for International Business r 1 International Logistics International Marketing |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business er 1 International Logistics International Marketing er 2 |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 AMB336 | er 2 Economics Entrepreneurship r 1 International Accounting Intercultural Communication and Negotiation Skills r 2 Importing and Exporting Finance for International Business r 1 International Logistics International Marketing r 2 International Business in the Asia-Pacific |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 AMB336 Year 4, Semeste MGB340 AMB369 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business er 1 International Business International Marketing er 2 International Business in the Asia-Pacific International Business Strategy |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 AMB336 Year 4, Semeste MGB340 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business er 1 International Logistics International Marketing er 2 International Business in the Asia-Pacific International Business strategy er 1 |
| Year 2, Semeste BSB113 MGB227 Year 3, Semeste AYB227 MGB225 Year 3, Semeste AMB210 EFB240 Year 4, Semeste AMB303 AMB336 Year 4, Semeste MGB340 AMB369 | er 2 Economics Entrepreneurship er 1 International Accounting Intercultural Communication and Negotiation Skills er 2 Importing and Exporting Finance for International Business er 1 International Business International Marketing er 2 International Business in the Asia-Pacific International Business Strategy |

Semesters

• Semester 1 (February)

| commence | nent |
|--|--|
| Year 1 Ser | |
| Year 1 Ser Year 2 Ser | |
| <u>Year 2 Ser</u> | |
| Year 3 Ser | nester 1 |
| Year 3 Ser | mester 2 |
| Year 4 Ser Year 4 Ser | |
| | 2 (July) commencement |
| Year 1, Se | mester 2 |
| • <u>Year 2, Se</u> | |
| Year 2, Semester 2 Year 3, Semester 1 | |
| Year 3, Semester 2 | |
| Year 4, Semester 1 | |
| Year 4, Se Year 5, Se | |
| | |
| Code | Title |
| | bruary) commencment |
| Year 1 Semeste | |
| BSB113 | Economics |
| BSB115 | Management |
| Year 1 Semeste | |
| BSB111 | Business Law and |
| D0D400 | Ethics |
| BSB126 | Marketing |
| Year 2 Semeste | |
| BSB110 | Accounting |
| BSB119 | Global Business |
| Year 2 Semeste | er 2 |
| MGB200 | Managing People |
| MGB227 | Entrepreneurship |
| Year 3 Semeste | er 1 |
| MGB226 | Innovation, Knowledge and Creativity |
| If you are compl stream: | leting the Management |
| MGB210 | Managing Operations |
| If you are comp | ••• |
| Entrepreneursh | |
| - | Contemporary |
| MGB201 | Employment Relations |
| Year 3 Semeste | er 2 |
| MGB225 | Intercultural Communication and |
| MGB335 | Negotiation SkillsManaging Projects |
| | Managing Business |
| MGB324 | Growth |
| MGB324 Year 4 Semeste | Growth |
| | Growth |
| Year 4 Semeste | Growth er 1 Real World Ready - |
| Year 4 Semeste BSB399 | Growth er 1 Real World Ready - Business Capstone Managing Risk |
| Year 4 Semeste BSB399 MGB341 | Growth er 1 Real World Ready - Business Capstone Managing Risk er 2 |
| Year 4 Semeste BSB399 MGB341 Year 4 Semeste | Growth er 1 Real World Ready - Business Capstone Managing Risk |

QUT

| | Change | |
|-------------------------------------|--|--|
| MGB338 | Workplace Learning | |
| Semester 2 (July | y) commencement | |
| Year 1, Semeste | er 2 | |
| BSB115 | Management | |
| BSB119 | Global Business | |
| Year 2, Semeste | | |
| BSB113 | Economics | |
| BSB126 | Marketing | |
| Year 2, Semeste | | |
| BSB111 | Business Law and Ethics | |
| BSB110 | Accounting | |
| Year 3, Semeste | | |
| MGB200 | Managing People | |
| MGB225 | Intercultural Communication and Negotiation Skills | |
| Year 3, Semeste | | |
| MGB226 | Innovation, Knowledge and Creativity | |
| MGB227 | Entrepreneurship | |
| Year 4, Semeste | er 1 | |
| MGB341 | Managing Risk | |
| If you are compl stream: | eting a management | |
| MGB210 | Managing Operations | |
| If you are compl entrepreneurshi | | |
| MGB201 | Contemporary Employment Relations | |
| Year 4, Semeste | er 2 | |
| MGB309 | Managing Strategically | |
| If you are compl stream: | eting a management | |
| MGB335 | Managing Projects | |
| | If you are completing an entrepreneurship stream: | |
| MGB324 | Managing Business Growth | |
| Year 5, Semester 1 | | |
| BSB399 | Real World Ready - Business Capstone | |
| Choose one of t | he following: | |
| MGB310 | Managing Sustainable Change | |
| MGB338 | Workplace Learning | |

Semesters

| ٠ | Semester 1 | (February) |
|---|------------|------------|
| | | |

- commencement ٠
- Year 1 Semester 1 Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- ٠ Year 3 Semester 1
- Year 3 Semester 2 ٠
- Year 4 Semester 1

| U U (| | |
|---|-------------------|--|
| Year 4 Semester 2 Semester 2 (July) commencement Year 1, Semester 2 Year 2, Semester 1 Year 3, Semester 1 Year 3, Semester 2 Year 4, Semester 1 Year 4, Semester 2 Year 5, Semester 1 | | |
| Code | Title | |
| Semester 1 (Februa | ary) commencement | |
| Year 1 Semester 1 | | |
| BSB113 | Economics | |
| BSB126 | Marketing | |
| Year 1 Semester 2 | | |
| | Business Law and | |

| BSB111 | Business Law and Ethics |
|--------------------|---|
| BSB115 | Management |
| Year 2 Semester 1 | |
| MGB227 | Entrepreneurship |
| BSB119 | Global Business |
| Year 2 Semester 2 | |
| AMB201 | Marketing and Audience Research |
| AMB200 | Consumer Behaviour |
| Year 3 Semester 1 | |
| AMB202 | Integrated Marketing Communication |
| AMB240 | Marketing Planning and Management |
| Year 3 Semester 2 | |
| BSB110 | Accounting |
| AMB336 | International Marketing |
| Year 4 Semester 1 | |
| AMB330 | Digital Portfolio |
| AMB340 | Services Marketing |
| Year 4 Semester 2 | |
| BSB399 | Real World Ready - Business Capstone |
| AMB359 | Strategic Marketing |
| Semester 2 (July) | commencement |
| Year 1, Semester 2 | 2 |
| BSB113 | Economics |
| BSB126 | Marketing |
| Year 2, Semester | 1 |
| BSB111 | Business Law and Ethics |
| BSB115 | Management |
| Year 2, Semester 2 | 2 |
| BSB110 | Accounting |
| AMB200 | Consumer Behaviour |
| Year 3, Semester | 1 |
| AMB201 | Marketing and |

| | Audionas Desserab | |
|--------------------|---|--|
| | Audience Research | |
| AMB240 | Marketing Planning and Management | |
| Year 3, Semester 2 | 2 | |
| AMB202 | Integrated Marketing Communication | |
| BSB119 | Global Business | |
| Year 4, Semester 1 | | |
| AMB330 | Digital Portfolio | |
| AMB340 | Services Marketing | |
| Year 4, Semester 2 | | |
| MGB227 | Entrepreneurship | |
| AMB336 | International Marketing | |
| Year 5, Semester 1 | | |
| BSB399 | Real World Ready - Business Capstone | |
| AMB359 | Strategic Marketing | |
| | | |

Semesters

| Semesters | |
|--|------------------------------------|
| Semesters Semester 1 (February) commencement Year 1 Semester 1 Year 1 Semester 2 Year 2 Semester 2 Year 3 Semester 2 Year 3 Semester 1 Year 4 Semester 1 Year 4 Semester 2 Semester 2 (July) commencement Year 1, Semester 2 Year 2, Semester 1 Year 3, Semester 1 Year 3, Semester 2 Year 4, Semester 2 Year 4, Semester 1 | |
| Year 4, Seme | |
| Year 5, Seme | |
| Code | Title |
| Semester 1 (Febru | ary) commencement |
| Year 1 Semester 1 | |
| BSB119 | Global Business |
| BSB126 | Marketing |
| Year 1 Semester 2 | |
| BSB110 | Accounting |
| BSB115 | Management |
| Year 2 Semester 1 | |
| AMB263 | Introduction to Public Relations |
| AMB264 | Public Relations Techniques |
| Year 2 Semester 2 | |
| AMB201 | Marketing and Audience Research |
| BSB111 | Business Law and Ethics |
| Voor 2 Competer 1 | |
| Year 3 Semester 1 | |



| | - |
|--------------------|---|
| AMB372 | Public Relations Planning |
| Year 3 Semester 2 | - |
| BSB113 | Economics |
| MGB227 | Entrepreneurship |
| Year 4 Semester 1 | |
| | Global Public |
| AMB374 | Relations Cases |
| BSB399 | Real World Ready - Business Capstone |
| Year 4 Semester 2 | |
| AMB375 | Public Relations Management |
| AMB379 | Public Relations Campaigns |
| Semester 2 (July) | |
| Year 1, Semester 2 | 2 |
| BSB119 | Global Business |
| BSB126 | Marketing |
| Year 2, Semester 2 | |
| BSB110 | Accounting |
| BSB115 | Management |
| Year 2, Semester 2 | 2 |
| BSB113 | Economics |
| AMB201 | Marketing and Audience Research |
| Year 3, Semester 7 | |
| AMB263 | Introduction to Public Relations |
| AMB264 | Public Relations Techniques |
| Year 3, Semester 2 | 2 |
| AMB372 | Public Relations Planning |
| MGB227 | Entrepreneurship |
| Year 4, Semester 7 | l |
| AMB373 | Issues, Stakeholders and Reputation |
| AMB374 | Global Public Relations Cases |
| Year 4, Semeter 2 | |
| AMB375 | Public Relations Management |
| AMB379 | Public Relations Campaigns |
| Year 5, Semester ? | l |
| BSB399 | Real World Ready - Business Capstone |
| BSB111 | Business Law and Ethics |
| | |



| Year | 2018 |
|-----------------------------------|---|
| QUT code | IX80 |
| CRICOS | 083029M |
| Duration (full-time) | 5.5 years |
| OP | 6 |
| Rank | 89 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$10,100 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$31,600 per year full-time (96 credit points) |
| Total credit points | 528 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | Dr Graham Johnson (Science); ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au; Law: Director of Undergraduate Programs - Peter Black |
| Discipline Coordinator | Dr Marion Bateson (Biological Science); Dr James Blinco (Chemistry); Dr Luke Nothdurft (Earth Science); Dr Andrew Baker (Environmental Science); and Prof Nunzio Motto (Physics); Law: Director of Undergraduate Programs - Peter Black Science: +61 7 3138 8822; Law: +61 7 3138 2707 Science: sef.enquiry@qut.edu.au; Law: law_enquiries@qut.edu.a u |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

Recommended Study: At least one of Chemistry, Physics, Biology, Geography, Earth Science or Maths C. We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: At least one of Chemistry, Physics, Biology, Geography, Earth Science or Maths C.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International Testing System) | English Language |
|---|------------------|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Structure Information

Students are required to complete 528 credit points, comprised of 192 credit points for the Bachelor of Science program and 336 credit points for the Bachelor of Laws program. You will study science and law units in your first four years and for the remainder of this course you will concentrate on law studies.

Under the Science component students will complete 16 units in total. Students will choose any of the following science majors that are offered in the Bachelor of Science (ST01) course: biology, chemistry, earth science, environmental science and physics.

Under the Law component students will complete 336 credit points of core units and a mixture of Introductory, General and Advanced Electives. Students may select up to 48 credit points of non-law electives or 48 credit points of a University-wide minor in place of four of the General Electives. Successful completion of a minor will be recognised on the Academic Record and / or the Australian Higher Education Graduation Statement.

Total Law credit points: 336 Total credit points for core units: 240 Total credit points for elective units: 96 Honours Level Units

96 credit points of Honours units listed below will be used to determine the Honours Levels of the LLB (Hons): LLH201 Legal Research, LLH206 Administrative Law, LLH302 Ethics and the Legal Profession, LLH305 Corporate Law, LLH401 Legal Research Capstone (24 cps) and two Advanced Electives in law.

Professional Recognition

The QUT LLB (Hons) is an approved degree for the purposes of the Legal Practitioners Admission Rules. Accordingly, it enables graduates to satisfy the academic requirements for admission to practise as a solicitor and/or barrister in all Australian states and territories.

Graduates will satisfy the requirements for membership in the relevant professional body for their science major.

Admission to practice

If, at the end of your degree, you wish to become a legal practitioner, you will need to complete further practical legal training (PLT). QUT also offers PLT in the form of the Graduate Diploma in Legal Practice.

Career Outcomes

As a graduate, you may enter legal practice with an education in both the content and process of science and data analysis that will enable you to deal with the complexities of litigation that have a scientific and technological dimension, such as inventions, trade secrets, quantitative evidence, and constitutional disputes giving rise to environmental issues. On the other hand, you may choose to follow a career path in the sciences, enhancing your opportunities in a particular discipline such as environmental science or biotechnology through your knowledge of the law.

You will graduate with specialised knowledge of cutting-edge technologies



Bachelor of Science/Bachelor of Laws (Honours)

and extensive practical experience using the latest techniques. You have a broad range of options to choose from and the flexibility to create your own personal science degree program.

In developing the LLB (Hons) the Faculty recognises that graduates are increasingly seeking a broad range of careers including, but not limited to, legal practice. The defining nature of the QUT LLB (Hons) is its real-world applied nature which will equip you with advanced knowledge and research and other skills and that meet the needs of not only the legal profession, but also government, community organisations, business and industry.

The LLB (Hons) provides students with an opportunity to advance their knowledge of law in specialised areas through the elective units offered as part of the course. The elective units allow you to study areas of the law that match your career aspirations.

Career opportunities include working in general legal practice, specialist legal practice, government departments and employment in private enterprise.

Non-standard attendance

Field work is a requirement in some areas of science.

Deferment

Domestic students can defer their offer in this course for one year. In exceptional circumstances up to 12 months of additional deferment may be granted.

Find out more at deferment

Domestic Course structure

Students are required to complete 528 credit points, comprised of 192 credit points for the Bachelor of Science program and 336 credit points for the Bachelor of Laws program. You will study science and law units in your first four years and for the remainder of this course you will concentrate on law studies.

Under the Science component students will complete 16 units in total. Students will choose any of the following science majors that are offered in the <u>Bachelor of Science</u> (ST01) course: biology, chemistry, earth science, environmental science and physics.

Under the Law component students will complete 336 credit points of core units and a mixture of Introductory, General and Advanced Electives. Students may select up to 48 credit points of non-law electives or 48 credit points of a University-wide minor in place of four of the general electives. Successful completion of a minor will be recognised on the Academic Record and / or the Australian Higher Education Graduation Statement.

Total Law credit points: 336 Total credit points for core units: 240 Total credit points for elective units: 96

Honours Level Units

96 credit points of Honours units listed below will be used to determine the Honours Levels of the LLB (Hons): LLH201 Legal Research, LLH206 Administrative Law, LLH302 Ethics and the Legal Profession, LLH305 Corporate Law, LLH401 Legal Research Capstone (24 cps) and two Advanced Electives in law.

International Course

structure

Students are required to complete 528 credit points, comprised of 192 credit points for the Bachelor of Science program and 336 credit points for the Bachelor of Laws program. You will study science and law units in your first four years and for the remainder of this course you will concentrate on law studies.

Under the Science component students will complete 16 units in total. Students will choose any of the following science majors that are offered in the <u>Bachelor of</u> <u>Science</u>.(ST01) course: biology, chemistry, earth science, environmental science and physics.

Under the Law component students will complete 336 credit points of core units and a mixture of Introductory, General and Advanced Electives. Students may select up to 48 credit points of non-law electives or 48 credit points of a University-wide minor in place of four of the General Electives. Successful completion of a minor will be recognised on the Academic Record and / or the Australian Higher Education Graduation Statement.

Total Law credit points: 336 Total credit points for core units: 240 Total credit points for elective units: 96

Honours Level Units

96 credit points of Honours units listed below will be used to determine the Honours Levels of the LLB (Hons): LLH201 Legal Research, LLH206 Administrative Law. LLH302 Ethics and the Legal Profession, LLH305 Corporate Law, LLH401 Legal Research Capstone (24 cps) and two Advanced Electives in law.

Sample Structure

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2
- Year 6 Semester 1
 Law Elective Information*

| Code | Title | | |
|--|---|--|--|
| Year 1 Semester 1 | | | |
| LLB101 | Introduction to Law | | |
| LLB102 | Torts | | |
| SEB115 | Experimental Science 1 | | |
| SEB116 | Experimental Science 2 | | |
| Year 1 Semester 2 | | | |
| LLB105 | Legal Problems and Communication | | |
| LLB106 | Criminal Law | | |
| Science Core Unit Option | | | |
| Science Major Option Unit (for Biology, Earth Science, Environmental Science) or MXB100 (Chemistry and Physics) | | | |
| For 2019, LLB107 Statutory Interpretation replaces LLB105 Legal Problems and Communication | | | |
| | | | |
| Year 2 Sem | ester 1 | | |
| Year 2 Sem LLB103 | ester 1 Dispute Resolution | | |
| | | | |
| LLB103 | Dispute Resolution Contemporary Law and | | |
| LLB103 LLB104 | Dispute Resolution Contemporary Law and Justice Grand Challenges in | | |
| LLB103 LLB104 SEB104 | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science | | |
| LLB103 LLB104 SEB104 SEB113 | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science | | |
| LLB103 LLB104 SEB104 SEB113 Year 2 Semu LLH201 | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science ester 2 | | |
| LLB103 LLB104 SEB104 SEB113 Year 2 Semu LLH201 | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science ester 2 Legal Research Law Elective | | |
| LLB103 LLB104 SEB104 SEB113 Year 2 Semu LLH201 Introductory | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science ester 2 Legal Research Law Elective or Unit | | |
| LLB103 LLB104 SEB104 SEB113 Year 2 Sem LLH201 Introductory Science Maj | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science ester 2 Legal Research Law Elective or Unit or Unit | | |
| LLB103 LLB104 SEB104 SEB113 Year 2 Sem LLH201 Introductory Science Maj Science Maj | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science ester 2 Legal Research Law Elective or Unit or Unit | | |
| LLB103 LLB104 SEB104 SEB113 Year 2 Semu LLH201 Introductory Science Maj Science Maj Year 3 Semu | Dispute Resolution Contemporary Law and Justice Grand Challenges in Science Quantitative Methods in Science ester 2 Legal Research Law Elective or Unit or Unit ester 1 | | |



Bachelor of Science/Bachelor of Laws (Honours)

| Science Maj | Science Major Unit | | |
|--|--|--|--|
| Year 3 Sem | ester 2 | | |
| LLB204 | Commercial and Personal Property Law | | |
| LLB205 | Equity and Trusts | | |
| Science Maj | or Unit | | |
| Science Maj | or Unit | | |
| Year 4 Sem | ester 1 | | |
| LLB301 | Real Property Law | | |
| General Law | / Elective | | |
| Science Maj | or Unit | | |
| Science Maj | or Unit | | |
| Year 4 Sem | ester 2 | | |
| LLB303 | Evidence | | |
| LLH206 | Administrative Law | | |
| Science Maj | or Unit | | |
| Science Maj | or Unit | | |
| Year 5 Sem | ester 1 | | |
| LLH302 | Ethics and the Legal Profession | | |
| LLB304 | Commercial Remedies | | |
| | v Elective or Non-law Jniversity-wide Minor Unit* | | |
| | VElective or Non-law Iniversity-wide Minor Unit* | | |
| Year 5 Sem | - | | |
| LLB306 | Civil Procedure | | |
| LLH305 | Corporate Law | | |
| General Law Elective or Non-law Elective or University-wide Minor Unit* | | | |
| General Law Elective or Non-law Elective or University-wide Minor Unit* | | | |
| Year 6 Sem | ester 1 | | |
| LLH401 | Legal Research Capstone | | |
| Advanced La | | | |
| Advanced Law Elective | | | |
| Law Elective Information* | | | |
| Law students may complete up to 4 non- law electives or a university wide minor comprised of 4 units in place of the equivalent number of general law electives. | | | |
| Semesters • Year 1. Semester 2 | | | |

- Year 1, Semester 2
- Year 2, Semester 1
 Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 ٠
- Year 4, Semester 2 • Year 5, Semester 1
- Year 5, Semester 2
- ٠
- Year 6, Semester 1 . Year 6, Semester 2
- *Law Elective Information •

Title Code Year 1, Semester 2

| LLB101 | Introduction to Law | |
|---|--|--|
| LLB102 | Torts | |
| Year 2, Semester 1 | | |
| LLB103 | Dispute Resolution | |
| LLB104 | Contemporary Law and Justice | |
| Year 2, Sem | nester 2 | |
| | Legal Problems and | |
| LLB105 | Communication | |
| LLB106 | Criminal Law | |
| Year 3, Sem | | |
| LLB202 | Contract Law | |
| LLH201 | Legal Research | |
| Year 3, Sem | nester 2 | |
| LLB204 | Commercial and Personal Property Law | |
| Introductory | Law Elective | |
| Year 4, Sem | nester 1 | |
| LLB203 | Constitutional Law | |
| General Law | v Elective | |
| Year 4, Sem | nester 2 | |
| LLB205 | Equity and Trusts | |
| LLH206 | Administrative Law | |
| Year 5, Sem | | |
| | | |
| | | |
| LLB301 | Real Property Law | |
| LLB301 General Lav Elective or U | Real Property Law v Elective or Non-law Jniversity-wide Minor Unit* | |
| LLB301 General Lav Elective or U Year 5, Sem | Real Property Law v Elective or Non-law Jniversity-wide Minor Unit* nester 2 | |
| LLB301 General Lav Elective or U Year 5, Sem LLB303 | Real Property Law v Elective or Non-law Jniversity-wide Minor Unit* nester 2 Evidence | |
| LLB301 General Lav Elective or U Year 5, Sem | Real Property Law v Elective or Non-law University-wide Minor Unit* nester 2 Evidence Civil Procedure | |
| LLB301 General Lav Elective or U Year 5, Sem LLB303 | Real Property Law v Elective or Non-law Jniversity-wide Minor Unit* nester 2 Evidence | |
| LLB301 General Law Elective or L Year 5, Sem LLB303 LLB306 LLH305 General Law | Real Property Law v Elective or Non-law Jniversity-wide Minor Unit* nester 2 Evidence Civil Procedure Corporate Law v Elective or Non-law | |
| LLB301 General Lav Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Lav Elective or U | Real Property Law v Elective or Non-law Jniversity-wide Minor Unit* nester 2 Evidence Civil Procedure Corporate Law v Elective or Non-law Jniversity-wide Minor Unit* | |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem | Real Property Law v Elective or Non-law University-wide Minor Unit* nester 2 Evidence Civil Procedure Corporate Law v Elective or Non-law University-wide Minor Unit* | |
| LLB301 General Lav Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Lav Elective or U | Real Property Law v Elective or Non-law University-wide Minor Unit* nester 2 Evidence Civil Procedure Corporate Law v Elective or Non-law University-wide Minor Unit* nester 1 Commercial Remedies | |
| LLB301 General Lav Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Lav Elective or U Year 6, Sem LLB304 LLH302 | Real Property Lawv Elective or Non-lawJniversity-wide Minor Unit*vester 2EvidenceCivil ProcedureCorporate Lawv Elective or Non-lawUniversity-wide Minor Unit*vester 1Commercial RemediesEthics and the LegalProfession | |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law | Real Property Law VElective or Non-law University-wide Minor Unit* Vester 2 Evidence Civil Procedure Corporate Law VElective or Non-law University-wide Minor Unit* Nester 1 Commercial Remedies Ethics and the Legal Profession VElective or Non-law | |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U | Real Property Law VElective or Non-law University-wide Minor Unit* Vester 2 Evidence Civil Procedure Corporate Law VElective or Non-law University-wide Minor Unit* Vester 1 Commercial Remedies Ethics and the Legal Profession VElective or Non-law University-wide Minor Unit* | |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law | Real Property Law V Elective or Non-law University-wide Minor Unit* Vester 2 Evidence Civil Procedure Corporate Law V Elective or Non-law University-wide Minor Unit* Nester 1 Commercial Remedies Ethics and the Legal Profession | |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law | Real Property Law V Elective or Non-law University-wide Minor Unit* Vester 2 Evidence Civil Procedure Corporate Law V Elective or Non-law University-wide Minor Unit* Nester 1 Commercial Remedies Ethics and the Legal Profession V Elective or Non-law University-wide Minor Unit* V Elective or Non-law | |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law Elective or U | Real Property Law V Elective or Non-law University-wide Minor Unit* Vester 2 Evidence Civil Procedure Corporate Law V Elective or Non-law University-wide Minor Unit* Nester 1 Commercial Remedies Ethics and the Legal Profession V Elective or Non-law University-wide Minor Unit* V Elective or Non-law | |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law Elective or U Year 6, Sem | Real Property Lawv Elective or Non-lawJniversity-wide Minor Unit*nester 2EvidenceCivil ProcedureCorporate Lawv Elective or Non-lawJniversity-wide Minor Unit*nester 1Commercial RemediesEthics and the LegalProfessionv Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawUniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawUniversity-wide Minor Unit* | |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law Elective or U General Law Elective or U Year 6, Sem | Real Property Lawv Elective or Non-lawJniversity-wide Minor Unit*ester 2EvidenceCivil ProcedureCorporate Lawv Elective or Non-lawJniversity-wide Minor Unit*ester 1Commercial RemediesEthics and the LegalProfessionv Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit* | |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law Elective or U Year 6, Sem LLH401 Advanced L | Real Property Lawv Elective or Non-lawJniversity-wide Minor Unit*nester 2EvidenceCivil ProcedureCorporate Lawv Elective or Non-lawJniversity-wide Minor Unit*nester 1Commercial RemediesEthics and the LegalProfessionv Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit*nester 2Legal Research Capstoneaw Elective | |
| LLB301 General Law Elective or U Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or U Year 6, Sem LLB304 LLH302 General Law Elective or U General Law Elective or U Year 6, Sem LLH401 Advanced L Advanced L | Real Property Lawv Elective or Non-lawJniversity-wide Minor Unit*nester 2EvidenceCivil ProcedureCorporate Lawv Elective or Non-lawJniversity-wide Minor Unit*nester 1Commercial RemediesEthics and the LegalProfessionv Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawUniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawUniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit*v Electiveaw Electiveaw Electiveaw Electiveaw Electiveaw Electiveaw Elective | |
| LLB301 General Law Elective or L Year 5, Sem LLB303 LLB306 LLH305 General Law Elective or L Year 6, Sem LLB304 LLH302 General Law Elective or L General Law Elective or L General Law Elective or L Year 6, Sem LLH401 Advanced L Advanced L | Real Property Lawv Elective or Non-lawJniversity-wide Minor Unit*vester 2EvidenceCivil ProcedureCorporate Lawv Elective or Non-lawJniversity-wide Minor Unit*nester 1Commercial RemediesEthics and the LegalProfessionv Elective or Non-lawJniversity-wide Minor Unit*v Elective or Non-lawJniversity-wide Minor Unit* | |

minor comprised of 4 units in place of the equivalent number of general law electives.

Semesters

- <u>Semester 1 (February)</u>
- **commencements**
- Year 1, Semester 1
- Year 1, Semester 2

| | Voor 2 | Somostor 1 | |
|---|---------------|---------------------|--|
| • | <u>rear z</u> | <u>, Semester 1</u> | |

- Year 2, Semester 2
- Year 3, Semester 1 ٠ •
 - Year 3, Semester 2 Year 4, Semester 1
- ٠
- Year 4, Semester 2
 Semester 2 (July) commencements

| Semester 2 (July) commencements | | |
|---|--|--|
| Code | Title | |
| Semester 1 (Febr | ruary) commencements | |
| Year 1, Semester | 1 | |
| SEB115 | Experimental Science | |
| SEB116 | Experimental Science 2 | |
| Year 1, Semester | 2 | |
| Science Core Uni | it Option | |
| Science Major Ur | nit Option | |
| Year 2, Semester | 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 2, Semester | 2 | |
| BVB101 | Foundations of Biology | |
| BVB102 | Evolution | |
| Year 3, Semester | 1 | |
| BVB202 | Experimental Design and Quantitative Methods | |
| BVB301 | Animal Biology | |
| Year 3, Semester | 2 | |
| BVB201 | Biological Processes | |
| BVB204 | Ecology | |
| Year 4, Semester | 1 | |
| BVB203 | Plant Biology | |
| BVB305 | Microbiology and the Environment | |
| Year 4, Semester 2 | | |
| BVB304 | Integrative Biology | |
| BVB313 | Population Genetics and Molecular Ecology | |
| Semester 2 (July) |) commencements | |
| | | |

Semesters

- Semester 1 (February) commencements
- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- ٠ Semester 2 (July) commencements
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1



of Laws (Honours)

| Bachelor of Se | cience/Bachelor of I |
|--|---|
| • Year 3, Sem | ester 2 |
| Year 4, Sem Yoar 4, Sem | ester 1 |
| <u>Year 4, Sem</u> <u>Year 5, Sem</u> | ester 1 |
| Year 5, Sem | <u>ester 2</u> |
| Code | Title |
| | uary) commencements |
| Year 1, Semester | |
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 1, Semester | 2 |
| MXB100 | Introductory Calculus and Algebra |
| Science Core Unit | t Option |
| Year 2, Semester | 1 |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| Year 2, Semester | 2 |
| CVB101 | General Chemistry |
| CVB102 | Chemical Structure and Reactivity |
| Year 3, Semester | 1 |
| CVB201 | Inorganic Chemistry |
| CVB202 | Analytical Chemistry |
| Year 3, Semester | |
| CVB203 | Physical Chemistry |
| CVB204 | Organic Structure and Mechanisms |
| Year 4, Semester | |
| CVB301 | Organic Chemistry: Strategies for Synthesis |
| | Applied Physical |
| CVB302 | Chemistry |
| Year 4, Semester | |
| CVB303 | Coordination Chemistry |
| CVB304 | Chemistry Research Project |
| Semester 2 (July) | |
| Year 1, Semester | |
| SEB104 | Grand Challenges in Science |
| MXB100 | Introductory Calculus and Algebra |
| Year 2, Semester | |
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 2, Semester | 2 |

| | and Reactivity | |
|--------------------|---|--|
| Year 3, Semester | 1 | |
| SEB113 | Quantitative Methods in Science | |
| Core Unit Option | | |
| Year 3, Semester | 2 | |
| (No Science Units |) | |
| Year 4, Semester | 1 | |
| CVB201 | Inorganic Chemistry | |
| CVB202 | Analytical Chemistry | |
| Year 4, Semester 2 | | |
| CVB203 | Physical Chemistry | |
| CVB204 | Organic Structure and Mechanisms | |
| Year 5, Semester | 1 | |
| CVB301 | Organic Chemistry: Strategies for Synthesis | |
| CVB302 | Applied Physical Chemistry | |
| Year 5, Semester 2 | | |
| CVB303 | Coordination Chemistry | |
| CVB304 | Chemistry Research Project | |

Semesters

| ٠ | Semester 1 | (February) |
|---|------------|------------|
| | | |

- <u>commencements</u> Year 1, Semester 1
- Year 1, Semester 2
 Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- ٠
- Year 3, Semester 2 Year 4, Semester 1 ٠
- Year 4, Semester 2 •
- Semester 2 (July) commencements

| Code | Title | |
|--------------------------|---------------------------------------|--|
| Semester 1 (Fel | bruary) commencements | |
| Year 1, Semest | er 1 | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 1, Semeste | er 2 | |
| Science Core Unit Option | | |
| Science Major L | Jnit Option | |
| Year 2, Semester 1 | | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 2, Semester 2 | | |
| ERB101 | Earth Systems | |
| ERB102 | Evolving Earth | |
| Year 3, Semester 1 | | |
| ERB201 | Destructive Earth: Natural Hazards | |
| ERB202 | Marine Geoscience | |

| Year 3, Semester 2 | | |
|---------------------------------|---|--|
| ERB203 | Sedimentary Geology and Stratigraphy | |
| ERB204 | Deforming Earth: Fundamentals of Structural Geology | |
| Year 4, Semester 1 | | |
| ERB301 | Chemical Earth | |
| ERB302 | Applied Geophysics | |
| Year 4, Semester 2 | | |
| ERB303 | Energy Resources and Basin Analysis | |
| ERB304 | Dynamic Earth: Plate Tectonics | |
| Semester 2 (July) commencements | | |

Semesters

- Semester 1 (February) commencements
- Year 1, Semester 1
 Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- •
- Year 3, Semester 1 Year 3, Semester 2 ٠
- Year 4, Semester 1
- Year 4, Semester 2 .
- Semester 2 (July) commencements

| Code | Title | |
|--------------------|--|--|
| Semester 1 (Feb | ruary) commencements | |
| Year 1, Semeste | r 1 | |
| SEB115 | Experimental Science | |
| SEB116 | Experimental Science 2 | |
| Year 1, Semeste | r 2 | |
| Science Core Un | it Option | |
| Science Major Op | otion | |
| Year 2, Semeste | r 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 2, Semeste | r 2 | |
| ERB101 | Earth Systems | |
| EVB102 | Ecosystems and the Environment | |
| Year 3, Semeste | r 1 | |
| BVB202 | Experimental Design and Quantitative Methods | |
| EVB203 | Geospatial Information Science | |
| Year 3, Semester 2 | | |
| BVB204 | Ecology | |
| EVB302 | Environmental Pollution | |
| Year 4, Semester | r 1 | |
| BVB311 | Conservation Biology | |

General Chemistry **Chemical Structure**

CVB101

CVB102

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=IX80&courseID=32824. CRICOS No.00213J

QUI

Bachelor of Science/Bachelor of Laws (Honours)

| EVB312 | Soils and the Environment |
|---------------------------------|---|
| Year 4, Semester 2 | |
| ERB310 | Groundwater Systems |
| EVB304 | Case Studies in Environmental Science |
| Semester 2 (July) commencements | |

Semesters

- Semester 1 (February)
 - **commencements**
- Year 1, Semester 1 Year 1, Semester 2
- Year 2, Semester 1 ٠
- Year 2, Semester 2 •
- Year 3, Semester 1
- Year 3, Semester 2 .
- Year 4, Semester 1 .
- Year 4, Semester 2 Semester 2 (July) commencements

| • <u>Semester 2 (July) commencements</u> | | |
|--|--|--|
| Code | Title | |
| Semester 1 (Febru | uary) commencements | |
| Year 1, Semester | 1 | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 1, Semester | 2 | |
| MXB100 | Introductory Calculus and Algebra | |
| Science Core Unit | Option | |
| Year 2, Semester | 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 2, Semester | 2 | |
| PVB101 | Physics of the Very Large | |
| PVB102 | Physics of the Very Small | |
| Year 3, Semester | 1 | |
| PVB200 | Computational and Mathematical Physics | |
| PVB203 | Experimental Physics | |
| Year 3, Semester 2 | | |
| PVB202 | Mathematical Methods in Physics | |
| PVB204 | Electromagnetism | |
| Year 4, Semester 1 | | |
| PVB301 | Materials and Thermal Physics | |
| PVB302 | Classical and Quantum Physics | |
| Year 4, Semester 2 | | |
| PVB303 | Nuclear and Particle | |

| | Physics |
|---------------------------------|------------------|
| PVB304 | Physics Research |
| Semester 2 (July) commencements | |

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on QUT Virtual.

| Introductory Law Electives | |
|----------------------------|--------------------------------------|
| Code | Title |
| LLB140 | Human Rights Law |
| LLB141 | Introduction to International Law |
| LLB142 | Regulation of Business |

Please note that some law elective units maybe offered in alternate years and/or are subject to student enrolments. Please refer QUT Real Law (LAW_Real_Law) Blackboard site under My Community on your blackboard homepage for unit offerings to determine which units will be available.

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on QUT Virtual.

| General Law Electives List | | |
|----------------------------|--|--|
| Code | Title | |
| LLB240 | Chinese Legal System | |
| LLB241 | Discrimination and Equal Opportunity Law | |
| LLB242 | Media Law | |
| LLB243 | Family Law | |
| LLB244 | Criminal Law Sentencing | |
| LLB245 | Sports Law | |
| LLB246 | Principles of Labour Law | |
| LLB340 | Banking and Finance Law | |
| LLB341 | Artificial Intelligence, Robots and the Law | |
| LLB342 | Immigration and Refugee Law | |
| LLB344 | Intellectual Property Law | |
| LLB345 | Internet Law | |
| LLB346 | Succession Law | |
| LLB347 | Taxation Law | |
| LLB348 | Socio-Legal Research Methods | |
| LLB349 | Japanese Law | |

The Law and Ethics LLB350 of War **Environmental Law** LLB440 Mining and LLB443 **Resources Law Real Estate** LLB444 Transactions Private International LLB446 Law International LLB447 Arbitration LLB460 Competition Moots A LLB461 Competition Moots B Learning in LLB462 **Professional Practice** Legal Clinic LLB463 (Organised Program) International Legal LLB464 Placement

LLB464 was previously titled Legal Clinic (International)

The new Bachelor of Laws (Honours) is effective from semester 1, 2015. As a result of this new course, some of the unit codes have changed to LLBxxx. Your study plan will be updated to reflect these changes. For information regarding these changes, please refer to the QUT Real Law (LAW_Real_Law) Blackboard site under My Community on your blackboard homepage or contact

law_enquiries@qut.edu.au for further information.

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on QUT Virtual.

| Advanced Law Electives | |
|------------------------|---|
| Code | Title |
| LLH470 | Commercial Contracts in Practice |
| LLH471 | Health Law and Practice |
| LLH472 | Public International Law |
| LLH473 | Independent Research Project |
| LLH474 | Insolvency Law |
| LLH475 | Theories of Law |
| LLH476 | Competition Law |
| LLH477 | Innovation and Intellectual Property Law |
| LLH478 | Advanced Criminal Law - Principles and Practice |

You can access details about University

QUI

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.gut.edu.au/enrolment/courses/courseCode=IX80&courseID=32824. CRICOS No.00213J

wide minor options from: http://www.student.qut.edu.au/studying/un its/university-wide-minors

Please note that students should allow 3 semesters to complete a minor to account for semesters of offering and any pre-requisite requirements.

| Course Notes | |
|--------------|-------|
| Code | Title |

QUT

Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | IX87 |
| CRICOS | 083025D |
| Duration (full-time) | 5.5 years |
| OP | 6 |
| Rank | 89 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$10,100 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$28,900 per year full-time (96 credit points) |
| Total credit points | 528 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry (Information Technology); ph: 61 7 3138 8822; email: sef.enquiry@qut.edu.au; or, Law: Dr Anna Huggins (Curriculum) and Jen Yule (Students) Iaw_enquiries@qut.edu.a u or phone 61 7 3138 2707 |
| Discipline Coordinator | Law: Dr Anna Huggins (Curriculum) and Jennifer Yule (Students); IT: Dr Wayne Kelly (Computer Science); and Dr Erwin Fielt (Information Systems). Law: +61 7 3138 2707; IT: +61 7 3138 8822 Law: law_enquiries@qut.edu.a u; IT: sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
 - Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|---|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Course structure information

Students are required to complete 528 credit points, comprised of 192 credit points for the Bachelor of Information Technology program and 336 credit points for the Bachelor of Laws program.

Requirements for the completion of the Bachelor of Information Technology component are as follows:

(a) 72 credit points (6 units) of IT Core units, which includes 24 credit points (2 units) of Option Units selected from an approved list.

(b) 120 credit points (10 units) of Major Core units

Information Technology Majors Choose your primary area of study, also known as your major, in the following specialisation areas: Information Systems or Computer Science.

Information Technology Options List The Bachelor of Information Technology Core Unit Options List comprises a range of units from which you choose to undertake two (2). The options include introductory units from a wide variety of disciplines offered at QUT.

Under the Law component students will complete 336 credit points of core units and a mixture of Introductory, General and Advanced Electives. Students may select up to 48 credit points of non-law electives or 48 credit points of a University-wide minor in place of four of the General Electives. Successful completion of a minor will be recognised on the Academic Record and / or the Australian Higher Education Graduation Statement.

Total Law credit points: 336 Total credit points for core units: 240 Total credit points for elective units: 96

Honours Level Units 96 credit points of Honours units listed below will be used to determine the Honours Levels of the LLB (Hons): LLH201 Legal Research, LLH206 Administrative Law, LLH302 Ethics and the Legal Profession, LLH305 Corporate Law, LLH401 Legal Research Capstone (24 cps) and two Advanced Electives in law.

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

The QUT LLB (Hons) is an approved degree for the purposes of the Legal Practitioners Admission Rules. Accordingly, it enables graduates to satisfy the academic requirements for admission to practise as a solicitor and/or barrister in all Australian states and territories.

Admission to practice

If, at the end of your degree, you wish to become a legal practitioner, you will need to complete further practical legal training (PLT). QUT also offers PLT in the form of the Graduate Diploma in Legal Practice.

Career Outcomes

Graduates may develop careers in cyberlaw, intellectual property and privacy, dealing with the legal regulation of the Internet including downloading music, mobile phone camera use or copyright issues. You may become a legal practitioner, barrister, in-house counsel, government lawyer or policy



adviser. There is also increased demand for roles in edemocracy both in egovernment service delivery and political campaigning.

In developing the LLB (Hons) the Faculty recognises that graduates are increasingly seeking a broad range of careers including, but not limited to, legal practice. The defining nature of the QUT LLB (Hons) is its real-world applied nature which will equip you with advanced knowledge and research and other skills and that meet the needs of not only the legal profession, but also government, community organisations, business and industry.

The LLB (Hons) provides students with an opportunity to advance their knowledge of law in specialised areas through the elective units offered as part of the course. The elective units allow you to study areas of the law that match your career aspirations.

Career opportunities include working in general legal practice, specialist legal practice, government departments and employment in private enterprise.

Pathways to Further Studies

The QUT Bachelor of Information Technology is located at Level 7 of the Australian Qualifications Framework (AQF). Eligible graduates may continue their studies in this discipline with an additional honours year in (IN10) Bachelor of Information Technology (Honours).

On successful completion of the Bachelor of Laws, there are a number of further study options open to you. The Bachelor of Laws meets the entry requirements for Practical Legal Training courses (for example, the QUT Graduate Diploma in Legal Practice). In addition, successful completion of the law degree will allow you to pursue postgraduate opportunities through research- and coursework-based higher degrees in law.

Deferment

Domestic students can defer their offer in this course for one year. In exceptional circumstances up to 12 months of additional deferment may be granted.

Find out more at deferment

Domestic Course structure

Students are required to complete 528 credit points, comprised of 192 credit points for the Bachelor of Information Technology program and 336 credit points for the Bachelor of Laws program. Requirements for the completion of the Bachelor of Information Technology component are as follows:

- 1. 72 credit points (6 units) of IT Core units, which includes 24 credit points (2 units) of Option Units selected from an approved list.
- (b) 120 credit points (10 units) of Major Core units

Information Technology Majors Choose your primary area of study, also known as your major, in the following specialisation areas: Information Systems or Computer Science.

Information Technology Options List The Bachelor of Information Technology Core Unit Options List comprises a range of units from which you choose to undertake two (2). The options include introductory units from a wide variety of disciplines offered at QUT.

Under the Law component students will complete 336 credit points of core units and a mixture of Introductory, General and Advanced Electives. Students may select up to 48 credit points of non-law electives or 48 credit points of a University-wide minor in place of four of the General Electives. Successful completion of a minor will be recognised on the Academic Record and / or the Australian Higher Education Graduation Statement.

Total Law credit points: 336 Total credit points for core units: 240 Total credit points for elective units: 96

Honours Level Units 96 credit points of Honours units listed below will be used to determine the Honours Levels of the LLB (Hons): LLH201 Legal Research, LLH206 Administrative Law, LLH302 Ethics and the Legal Profession, LLH305 Corporate Law, LLH401 Legal Research Capstone (24 cps) and 2 x 12 cp Advanced Law Electives

International Course structure

Students are required to complete 528 credit points, comprised of 192 credit points for the Bachelor of Information Technology program and 336 credit points for the Bachelor of Laws program.

Requirements for the completion of the Bachelor of Information Technology component are as follows:

1. 72 credit points (6 units) of IT Core units, which includes 24 credit points (2 units) of Option Units selected from an approved list. (b) 120 credit points (10 units) of Major Core units

Information Technology Majors Choose your primary area of study, also known as your major, in the following specialisation areas: Information Systems or Computer Science.

Information Technology Options List The Bachelor of Information Technology Core Unit Options List comprises a range of units from which you choose to undertake two (2). The options include introductory units from a wide variety of disciplines offered at QUT.

Under the Law component students will complete 336 credit points of core units and a mixture of Introductory, General and Advanced Electives. Students may select up to 48 credit points of non-law electives or 48 credit points of a University-wide minor in place of four of the General Electives. Successful completion of a minor will be recognised on the Academic Record and / or the Australian Higher Education Graduation Statement.

Total Law credit points: 336 Total credit points for core units: 240 Total credit points for elective units: 96

Honours Level Units 96 credit points of Honours units listed below will be used to determine the Honours Levels of the LLB (Hons): LLH201 Legal Research, LLH206 Administrative Law, LLH302 Ethics and the Legal Profession, LLH305 Corporate Law, LLH401 Legal Research Capstone (24 cps) and 2 x 12 cp Advanced Law Electives.

Sample Structure

Before enrolling in an option (elective) unit, you must ensure you have met any requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
 Year 4, Semester 2
- Year 5, Semester 1
- Year 5, Semester 2
- Year 6, Semester 1

Code Title Year 1, Semester 1



LLB306

LLH305

Civil Procedure

Corporate Law

General Law Elective or Non-law Elective or University-wide Minor Unit General Law Elective or Non-law

| Dauncior of II | |
|---|---|
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| LLB101 | Introduction to Law |
| LLB102 | Torts |
| Year 1, Semester | r 2 |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| LLB105 | Legal Problems and Communication |
| LLB106 | Criminal Law |
| For 2019, LLB10 Interpretation rep Problems and Co | laces LLB105 Legal |
| Year 2, Semester | |
| IT Core Option U | |
| IT Core Option U | |
| LLB103 | Dispute Resolution |
| | Contemporary Law |
| LLB104 | and Justice |
| Year 2, Semester | r 2 |
| IT Major Unit | |
| IT Major Unit | Ele etitore |
| Introductory Law | |
| LLH201 | Legal Research |
| Year 3, Semester IT Major Unit | r 1 |
| IT Major Unit | |
| LLB202 | Contract Law |
| LLB203 | Constitutional Law |
| Year 3, Semester | r 2 |
| IT Major Unit | |
| IT Major Unit | |
| LLB204 | Commercial and Personal Property Law |
| LLB205 | Equity and Trusts |
| Year 4, Semester | r 1 |
| IT Major Unit | |
| IT Major Unit | |
| LLB301 | Real Property Law |
| General Law Elec | ctive |
| Year 4, Semester | r 2 |
| IT Major Unit | |
| IT Major Unit | |
| LLB303 | Evidence |
| LLH206 | Administrative Law |
| Year 5, Semester | r 1 |
| LLB304 | Commercial Remedies |
| LLH302 | Ethics and the Legal Profession |
| General Law Elec | |
| Elective or University-wide Minor Unit | |
| General Law Elective or Non-law Elective or University-wide Minor Unit | |
| Year 5, Semester | |
| | |

| Elective or L | Iniversity-wide Minor Unit | |
|--|--|--|
| Year 6, Sem | ester 1 | |
| LLH401 | Legal Research Capstone | |
| Advanced Law Elective | | |
| Advanced La | aw Elective | |
| Semesters Year 1, Semester 2 Year 2, Semester 1 Year 2, Semester 2 | | |
| Year 3, Semester 1 Year 3, Semester 2 Year 4, Semester 1 Year 4, Semester 2 Year 5, Semester 1 Year 5, Semester 2 | | |
| • <u>Year 6,</u> | Semester 1 | |
| | Semester 2 lective Information | |
| | | |
| Code Year 1, Sem | Title | |
| LLB101 | Introduction to Law | |
| LLB101 LLB102 | Torts | |
| Year 2, Sem | | |
| LLB103 | Dispute Resolution | |
| LLB104 | Contemporary Law and Justice | |
| Year 2, Sem | | |
| rear 2, Sem | Legal Problems and | |
| LLB105 | Communication | |
| LLB106 | Criminal Law | |
| Interpretation | B107 Statutory n replaces LLB105 Legal d Communication | |
| Year 3, Sem | ester 1 | |
| | Contract Law | |
| LLH201 | Legal Research | |
| Year 3, Sem | ester 2 | |
| | | |
| LLB204 | Commercial and Personal Property Law | |
| | | |
| | Property Law Law Elective ester 1 | |
| Introductory Year 4, Sem LLB204 | Property Law Law Elective ester 1 Commercial and Personal Property Law | |
| Introductory Year 4, Sem LLB204 General Law | Property Law Law Elective ester 1 Commercial and Personal Property Law V Elective | |
| Introductory Year 4, Sem LLB204 | Property Law Law Elective ester 1 Commercial and Personal Property Law V Elective ester 2 | |
| Introductory Year 4, Sem LLB204 General Law Year 4, Sem LLB205 | Property Law Law Elective ester 1 Commercial and Personal Property Law / Elective ester 2 Equity and Trusts | |
| Introductory Year 4, Sem LLB204 General Law Year 4, Sem LLB205 LLH206 | Property Law Law Elective ester 1 Commercial and Personal Property Law Elective ester 2 Equity and Trusts Administrative Law | |
| Introductory Year 4, Sem LLB204 General Law Year 4, Sem LLB205 LLH206 Year 5, Sem | Property Law Law Elective ester 1 Commercial and Personal Property Law / Elective ester 2 Equity and Trusts Administrative Law ester 1 | |
| Introductory Year 4, Sem LLB204 General Law Year 4, Sem LLB205 LLH206 Year 5, Sem LLB301 | Property Law Law Elective ester 1 Commercial and Personal Property Law / Elective ester 2 Equity and Trusts Administrative Law ester 1 Real Property Law | |
| Introductory Year 4, Sem LLB204 General Law Year 4, Sem LLB205 LLH206 Year 5, Sem LLB301 General Law | Property Law Law Elective ester 1 Commercial and Personal Property Law / Elective ester 2 Equity and Trusts Administrative Law ester 1 | |

| Year 5, Sem | lester 2 | |
|---|------------------------------------|--|
| LLB303 | Evidence | |
| LLB306 | Civil Procedure | |
| LLH305 | Corporate Law | |
| General Law Elective or Non-law Elective or University-wide Minor Unit* | | |
| Year 6, Sem | lester 1 | |
| LLB304 | Commercial Remedies | |
| LLH302 | Ethics and the Legal Profession | |
| General Law Elective or Non-law Elective or University-wide Minor Unit* | | |
| General Law Elective or Non-law Elective or University-wide Minor Unit* | | |
| Year 6, Sem | lester 2 | |
| Advanced Law Elective | | |
| Advanced Law Elective | | |
| *Law Elective Information | | |
| Law Students may complete up to 4 non-law electives or a university wide minor comprised of 4 units in place of the equivalent number of general law | | |

Semesters

• Semester 1 (February)

electives.

| Semester 1 (reordary) commencements Year 1, Semester 1 Year 1, Semester 2 Year 2, Semester 1 Year 3, Semester 1 Year 3, Semester 2 Year 4, Semester 1 Year 4, Semester 1 | | |
|---|---|--|
| | July) commencements | |
| <u>Year 1, Seme</u> <u>Year 2, Seme</u> | <u>ester 2</u> ester 1 | |
| Year 2, Seme | ester 2 | |
| Year 3, Seme Year 3, Seme | ester 1 | |
| Year 3, Seme Year 4, Seme | | |
| Year 4, Seme | ester 2 | |
| Year 5, Seme | ester 1 | |
| Code | Title | |
| Semester 1 (February) commencements | | |
| Semester 1 (Febru | uary) commencements | |
| Semester 1 (Febru Year 1, Semester | | |
| | | |
| Year 1, Semester | 1 | |
| Year 1, Semester IFB101 | 1 Impact of IT Computer Technology Fundamentals | |
| Year 1, Semester IFB101 IFB102 | 1 Impact of IT Computer Technology Fundamentals | |
| Year 1, Semester IFB101 IFB102 Year 1, Semester IFB104 IFB130 | 1Impact of ITComputerTechnologyFundamentals2Building IT SystemsDatabaseManagement | |
| Year 1, Semester IFB101 IFB102 Year 1, Semester IFB104 | 1Impact of ITComputerTechnologyFundamentals2Building IT SystemsDatabaseManagement | |
| Year 1, Semester IFB101 IFB102 Year 1, Semester IFB104 IFB130 | 1Impact of ITComputerTechnologyFundamentals2Building IT SystemsDatabaseManagement | |
| Year 1, Semester IFB101 IFB102 Year 1, Semester IFB104 IFB130 Year 2, Semester | 1Impact of ITComputerTechnologyFundamentals2Building IT SystemsDatabaseManagement1Designing for IT | |
| Year 1, Semester IFB101 IFB102 Year 1, Semester IFB104 IFB130 Year 2, Semester IFB103 | 1Impact of ITComputerTechnologyFundamentals2Building IT SystemsDatabaseManagement1Designing for ITn | |



| | Principles |
|----------------------------|---|
| CAB202 | Microprocessors and |
| | Digital Systems |
| Year 3, Semester CAB203 | 1 Discrete Structures |
| | Software |
| CAB302 | Development |
| Year 3, Semester | 2 |
| CAB303 | Networks |
| IFB299 | IT Project Design and Development |
| Year 4, Semester | |
| CAB301 | Algorithms and Complexity |
| IFB398 | Capstone Project (Phase 1) |
| Year 4, Semester | 2 |
| IFB399 | Capstone Project (Phase 2) |
| Select one of: | |
| CAB401 | High Performance and Parallel Computing |
| CAB402 | Programming Paradigms |
| CAB403 | Systems Programming |
| Semester 2 (July) | |
| Year 1, Semester | 2 |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| Year 2, Semester | 1 |
| IFB103 | Designing for IT |
| IFB104 | Building IT Systems |
| Year 2, Semester | |
| CAB201 | Programming Principles |
| IFB130 | Database Management |
| Year 3, Semester | 1 |
| CAB202 | Microprocessors and Digital Systems |
| CAB301 | Algorithms and Complexity |
| Year 3, Semester | 2 |
| CAB303 | Networks |
| IFB299 | IT Project Design and Development |
| Year 4, Semester | |
| CAB203 | Discrete Structures |
| CAB302 | Software Development |
| Year 4, Semester | |
| IFB398 | Capstone Project (Phase 1) |

| Select ONE of: | | |
|--|---|--|
| CAB401 | High Performance and Parallel Computing | |
| CAB403 | Systems Programming | |
| OR IT Core Unit Option | | |
| Year 5, Semester | 1 | |
| IFB399 | Capstone Project (Phase 2) | |
| Select ONE of: | | |
| CAB401 | High Performance and Parallel Computing | |
| CAB402 | Programming Paradigms | |
| OR IT Core Unit Option | | |
| (Select IT Core Unit Option here, if not selected previously.) | | |

Semesters

| Semesters | | |
|---|---|--|
| Semester 1 (February) | | |
| commencements | | |
| Year 1, Semester 1 | | |
| Year 1, Semester 2 | | |
| Year 2, Semester 1 | | |
| Year 2, Semester 2 | | |
| Year 3, Semester 1 | | |
| Year 3, Semester 2 Year 4, Semester 1 | | |
| Year 4, Semes | ter 2 | |
| Semester 2 (Juli | <u>uly) commencements</u> | |
| Year 1, Semes | ter 2 | |
| Year 2, Semes | ter 1 | |
| Year 2, Semes | ter 2 | |
| Year 3, Semes | ter 1 | |
| Year 3, Semes | | |
| Year 4, Semes | ter 1 | |
| Year 4, Semes | ster 2 | |
| Year 5, Semes | <u>ster 1</u> | |
| Code | Title | |
| Semester 1 (Februa | ry) commencements | |
| | | |
| Year 1, Semester 1 | | |
| Year 1, Semester 1 IFB101 | Impact of IT | |
| | - | |
| | Impact of IT Computer Technology | |
| IFB101 | Computer | |
| IFB101 IFB102 | Computer Technology | |
| IFB101 | Computer Technology | |
| IFB101 IFB102 Year 1, Semester 2 IFB104 | Computer Technology Fundamentals Building IT Systems | |
| IFB101 IFB102 Year 1, Semester 2 | Computer Technology Fundamentals Building IT Systems Database | |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 | Computer Technology Fundamentals Building IT Systems | |
| IFB101 IFB102 Year 1, Semester 2 IFB104 | Computer Technology Fundamentals Building IT Systems Database Management | |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 | Computer Technology Fundamentals Building IT Systems Database | |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 | Computer Technology Fundamentals Building IT Systems Database Management | |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 IT Core Unit Option | Computer Technology Fundamentals Building IT Systems Database Management Designing for IT | |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 IT Core Unit Option Year 2, Semester 2 | Computer Technology Fundamentals Building IT Systems Database Management Designing for IT | |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 IT Core Unit Option | Computer Technology Fundamentals Building IT Systems Database Management Designing for IT Designing for IT | |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 IT Core Unit Option Year 2, Semester 2 | Computer Technology Fundamentals Building IT Systems Database Management Designing for IT Designing for IT | |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 IT Core Unit Option Year 2, Semester 2 IAB201 | Computer Technology Fundamentals Building IT Systems Database Management Designing for IT Designing for IT Modelling Information Systems Business of | |
| IFB101 IFB102 Year 1, Semester 2 IFB104 IFB130 Year 2, Semester 1 IFB103 IT Core Unit Option Year 2, Semester 2 | Computer Technology Fundamentals Building IT Systems Database Management Designing for IT Designing for IT | |

| Year 3, Semester 1 | |
|---|---|
| Tear o, cemester T | Business Process |
| IAB203 | Modelling |
| IAB204 | Business Analysis |
| Year 3, Semester 2 | |
| IAB205 | Corporate Systems |
| IFB299 | IT Project Design and Development |
| Year 4, Semester 1 | |
| IFB398 | Capstone Project (Phase 1) |
| Select one of: | |
| IAB302 | Information Systems Consulting |
| IAB303 | Business Intelligence |
| IAB304 | Project Management |
| Year 4, Semester 2 | |
| | Enterprise |
| IAB301 | Architecture |
| IFB399 | Capstone Project (Phase 2) |
| Semester 2 (July) c | · · · · |
| Year 1, Semester 2 | |
| IFB101 | Impact of IT |
| IFB102 | Computer Technology Fundamentals |
| | i unuuniontulo |
| Year 2. Semester 1 | |
| Year 2, Semester 1 IFB103 | Designing for IT |
| | Designing for IT Building IT Systems |
| IFB103 IFB104 | |
| IFB103 | Building IT Systems Database |
| IFB103 IFB104 Year 2, Semester 2 | Building IT Systems |
| IFB103 IFB104 Year 2, Semester 2 IFB130 | Building IT Systems Database Management Modelling Information |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 | Building IT Systems Database Management Modelling Information Systems Business of Information |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 | Building IT Systems Database Management Modelling Information Systems Business of |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 | Building IT Systems Database Management Modelling Information Systems Business of Information |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option | Building IT Systems Database Management Modelling Information Systems Business of Information |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 | Building IT Systems Database Management Modelling Information Systems Business of Information Technology |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 | Building IT Systems Database Management Modelling Information Systems Business of Information Technology Business Analysis |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 | Building IT Systems Database Management Modelling Information Systems Business of Information Technology Business Analysis |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 | Building IT Systems Database Management Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process Modelling IT Project Design |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 IAB203 IFB299 | Building IT Systems Database Management Modelling Information Systems Business of Information Corporate Systems Business Process Modelling |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 IAB203 | Building IT Systems Database Management Database Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process Modelling IT Project Design and Development Enterprise |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 IAB203 IFB299 Year 4, Semester 2 | Building IT Systems Database Management Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process Modelling IT Project Design and Development Enterprise Architecture |
| IFB103 IFB104 Year 2, Semester 2 IFB130 IAB201 Year 3, Semester 1 IAB202 IT Core Unit Option Year 3, Semester 2 IAB204 IAB205 Year 4, Semester 1 IAB203 IFB299 Year 4, Semester 2 | Building IT Systems Database Management Database Modelling Information Systems Business of Information Technology Business Analysis Corporate Systems Business Process Modelling IT Project Design and Development Enterprise |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=IX87&courseID=32831. CRICOS No.00213J

QUT

| IFB399 | Capstone Project (Phase 2) |
|----------------|-----------------------------------|
| Select ONE of: | |
| IAB302 | Information Systems Consulting |
| IAB303 | Business Intelligence |
| IAB304 | Project Management |

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

| Introductory Law Electives | |
|----------------------------|--------------------------------------|
| Code | Title |
| LLB140 | Human Rights Law |
| LLB141 | Introduction to International Law |
| LLB142 | Regulation of Business |

Please note that some law elective units maybe offered in alternate years and/or are subject to student enrolments. Please refer QUT Real Law (LAW_Real_Law) Blackboard site under My Community on your blackboard homepage for unit offerings to determine which units will be available.

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

| General Law Electives List | |
|----------------------------|--|
| Code | Title |
| LLB240 | Chinese Legal System |
| LLB241 | Discrimination and Equal Opportunity Law |
| LLB242 | Media Law |
| LLB243 | Family Law |
| LLB244 | Criminal Law Sentencing |
| LLB245 | Sports Law |
| LLB246 | Principles of Labour Law |
| LLB340 | Banking and Finance Law |
| LLB341 | Artificial Intelligence, Robots and the Law |
| LLB342 | Immigration and Refugee Law |
| LLB344 | Intellectual Property Law |
| LLB345 | Internet Law |

| LLB346 | Succession Law |
|---|--------------------------------------|
| LLB347 | Taxation Law |
| LLB348 | Socio-Legal Research Methods |
| LLB349 | Japanese Law |
| LLB350 | The Law and Ethics of War |
| LLB440 | Environmental Law |
| LLB443 | Mining and Resources Law |
| LLB444 | Real Estate Transactions |
| LLB446 | Private International Law |
| LLB447 | International Arbitration |
| LLB460 | Competition Moots A |
| LLB461 | Competition Moots B |
| LLB462 | Learning in Professional Practice |
| LLB463 | Legal Clinic (Organised Program) |
| LLB464 | International Legal Placement |
| LLB464 was previously titled Legal Clinic (International) | |

The new Bachelor of Laws (Honours) is effective from semester 1, 2015. As a result of this new course, some of the unit codes have changed to LLBxxx. Your study plan will be updated to reflect these changes. For information regarding these changes, please refer to the QUT Real Law (LAW_Real_Law) Blackboard site under My Community on your blackboard homepage or contact

<u>law enquiries@qut.edu.au</u> for further information.

Before enrolling in an option (elective) unit, you must ensure you have met any pre- or co-requisite requirements. You can check this by referring to the unit outlines on <u>QUT Virtual</u>.

| Advanced Law Electives | |
|------------------------|---|
| Code | Title |
| LLH470 | Commercial Contracts in Practice |
| LLH471 | Health Law and Practice |
| LLH472 | Public International Law |
| LLH473 | Independent Research Project |
| LLH474 | Insolvency Law |
| LLH475 | Theories of Law |
| LLH476 | Competition Law |
| LLH477 | Innovation and Intellectual Property |

| | Law |
|--------|----------------------|
| LLH478 | Advanced Criminal |
| | Law - Principles and |
| | Practice |



Bachelor of Mathematics (Honours)

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | MS10 |
| CRICOS | 080486K |
| Duration (full-time) | 1 year |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,700 per year full-time (96 credit points) |
| Total credit points | 96 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Elliot Carr; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirement

A completed recognised bachelor degree with a minimum grade point average (GPA) score of 4.5 (on QUT's 7-point scale) completed within the last 5 years in the fields of:

- mathematicscomputer science
- economics or finance
- physics
- engineering

Applicants are required to nominate their proposed topic and supervisor. Places are subject to supervisor availability.

International Entry requirements Academic entry requirement

A completed recognised bachelor degree with a minimum grade point average (GPA) score of 4.5 (on QUT's 7-point scale) completed within the last 5 years in the fields of:

- mathematics
- computer science
- economics or finance
- physics
- engineering

Applicants are required to nominate their proposed topic and supervisor. Places are subject to supervisor availability.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Design

Students undertake a 36 credit point Research Project.

Overview

The Bachelor of Mathematics (Honours) course provides extended modern and rigorous training in mathematical sciences and related research, to prepare students both for higher-level graduate careers in industry and government and for research at PhD or Research Masters level. The course contributes to addressing the continuing shortage of highly trained mathematical scientists in Australia and abroad.

Through a combination of research and advanced coursework units, students pursue specialised studies in an area of mutual interest with a personal research mentor/supervisor. Research units will enable students to develop an understanding of the nature of mathematical and statistical approaches to solving real world, current research problems. Coursework units provide students the opportunity to develop much more advanced skills and knowledge compared with those built in the undergraduate course. The coursework emphasises mathematics and statistics that is required for current research and for a competitive edge in the employment market.

The course provides students with further depth of knowledge and analytical skills expected of professionals who apply mathematics, computational methods, decision science and statistics in the workplace and in further research.

Course Structure

Requirements for the completion of MS10 Bachelor of Mathematics (Honours) are as follows:

CORE: Foundations of Research unit and Reviewing the Field unit

OPTION: A choice of either the *Expanded Research* Strand or the *Extended Coursework* Strand

Each strand comprises of coursework and a major research project supervised by QUT staff.

Career Outcomes

Mathematics graduates are employed across a wide range of areas. These include, but are not limited to, finance, investment, data analytics, defence and national security, research, information technology, engineering modelling and simulation, environmental science, health, management, marketing, logistics, media, and education. In addition to their knowledge and skills in mathematics, graduates are also highly valued for their analytical and problem-solving skills. Development of skills in communication, problem-solving, critical thinking and teamwork form an integral part of the course.



Bachelor of Mathematics (Honours)

Professional Recognition

Graduates of this course may be eligible for membership of the Australian Mathematical Society, Statistical Society of Australia and/or the Australian Society for Operations Research

Pathways to Further Study

The QUT Bachelor of Mathematics (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Research Masters and/or Doctoral level programs.

Domestic Course structure

Requirements for the completion of MS10 Bachelor of Mathematics (Honours) are as follows:

SEB400 Foundations of Research (12 cp)

SEB404 Honours Research Project (36 cp)

SEB410 Advanced Topic 1 (12 cp)

SEB411 Advanced Topic 2 (12 cp)

SEB412 Advanced Topic 3 (12 cp)

SEB413 Advanced Topic 4 (12 cp)

International Course structure

Requirements for the completion of MS10 Bachelor of Mathematics (Honours) are as follows:

SEB400 Foundations of Research (12 cp)

SEB404 Honours Research Project (36 cp)

SEB410 Advanced Topic 1 (12 cp)

SEB411 Advanced Topic 2 (12 cp)

SEB412 Advanced Topic 3 (12 cp)

SEB413 Advanced Topic 4 (12 cp)

Sample Structure

| Code | Title |
|------------|----------------------------|
| Semester 1 | |
| SEB400 | Foundations of Research |
| SEB410 | Advanced Topic 1 |
| SEB411 | Advanced Topic 2 |
| SEB413 | Advanced Topic 4 |
| Semester 2 | |
| SEB404-1 | Honours |

| | Research Project-1 |
|----------|----------------------------------|
| SEB404-2 | Honours Research Project-2 |
| SEB404-3 | Honours Research Project-3 |
| SEB412 | Advanced Topic 3 |

Handbook

| Year | 2018 | |
|-----------------------------------|--|--|
| QUT code | SE40 | |
| CRICOS | 084922G | |
| Duration (full-time) | 5 years | |
| OP | 7 | |
| Rank | 86 | |
| OP Guarantee | Yes | |
| Campus | Gardens Point | |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) | |
| International fee (indicative) | 2018: \$32,500 per year full-time (96 credit points) | |
| Total credit points | 480 | |
| Start months | February | |
| Int. Start Months | February | |
| Deferment | You can defer your offer and postpone the start of your course for one year. | |
| Course Coordinator | SEF Enquiries - (Engineering major); Associate Professor Tim Moroney (Mathematics major); email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 | |
| Discipline Coordinator | Dr Thomas Rainey (Chemical Process), Dr Brian Lee (Civil); Dr Wayne Kelly (Computer & Software Systems); Dr Jacob Coetzee (Electrical); Dr Aaron Mcfadyen (Electrical & Aerospace); Professor Ted Steinberg (Mechanical); Ass. Professor Jason Ford (Mechatronics); Dr Devakar Epari (Medical); TBA (Applied and Computational Mathematics); Associate Prof Paul Corry (Decision Science); and Associate Prof Chris Drovandi (Statistical Science) | |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended Study: Chemistry, Mathematics C, Physics.

International Subject prerequisites

Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended Study: Chemistry, Mathematics C, Physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking 6.0 | | |

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours) in SE40, students are required to complete 288 credit points of course units, as outlined below:

- First year: four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course structure

To graduate with a Bachelor of Engineering (Honours) in SE40, students are required to complete 288 credit points of course units, as outlined below:

- First year: four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x Advanced major units 60cp.

Sample Structure

Semesters

- <u>Applied and Computational</u> Mathematics Major unit set:
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- <u>NOTE:</u>

| Code | Title | | |
|--|--|--|--|
| Applied and Computational Mathematics Major unit set: | | | |
| Year 1 Sem | Year 1 Semester 1 | | |
| MXB102 Abstract Mathematical Reasoning | | | |
| Maths Core | Options Unit** | | |
| OR | | | |
| MXB101 | Probability and Stochastic Modelling 1 | | |
| OR | | | |
| MXB103 Introductory Computational Mathematics | | | |
| | | | |
| Year 1 Sem | ester 2 | | |
| Year 1 Sem MXB105 | ester 2 Calculus of One and Two Variables | | |
| MXB105 MXB106 | Calculus of One and Two Variables Linear Algebra and Differential Equations | | |
| MXB105 MXB106 (PLEASE Ne nominate yo Study Plan t | Calculus of One and Two Variables Linear Algebra and Differential Equations OTE: you will need to our Maths major in your o select MXB105 and nese units are common to all | | |
| MXB105 MXB106 (PLEASE Normoniate yo Study Plan t MXB106. Th | Calculus of One and Two Variables Linear Algebra and Differential Equations OTE: you will need to our Maths major in your o select MXB105 and nese units are common to all majors) | | |
| MXB105 MXB106 (PLEASE Nonominate yo Study Plan t MXB106. Th three Maths | Calculus of One and Two Variables Linear Algebra and Differential Equations OTE: you will need to our Maths major in your o select MXB105 and nese units are common to all majors) | | |

| OR Maths Core Options Unit** (select | if |
|--------------------------------------|----|
| completed MXB101 in first year) | |
| | |

| | MXB103 | Introductory Computational Mathematics |
|---------------------------------------|--------|--|
| OP Matha Cara Ontiona Linit** (aslast | | ore Optione Unit** (coloct if |



| completed N | completed MXB103 in first year) | | |
|-------------------------------------|--|--|--|
| Year 2 Sem | ester 2 | | |
| MXB107 | Introduction to Statistical Modelling | | |
| Maths Core | Options Unit** | | |
| Year 3 Sem | ester 1 | | |
| MXB201 | Advanced Linear Algebra | | |
| MXB221 | Ordinary Differential Equations | | |
| Year 3 Sem | ester 2 | | |
| MXB202 | Advanced Calculus | | |
| MXB222 | Computational Linear Algebra | | |
| Year 4 Sem | ester 1 | | |
| MXB321 | Applied Transport Theory | | |
| MXB322 | Partial Differential Equations | | |
| Year 4 Semester 2 | | | |
| MXB323 | Dynamical Systems | | |
| MXB324 | MXB324 Computational Fluid Dynamics | | |
| NOTE: | | | |
| ** Only TWO (2) Option units may be | | | |

** Only TWO (2) Option units may be taken in these 4 unit-slots.

Semesters

- Decision Science Major unit set:
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
 Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- NOTE:

| Code | Title | | | |
|--|--|--|--|--|
| Decision Sc | Decision Science Major unit set: | | | |
| Year 1 Sem | ester 1 | | | |
| MXB102 | Abstract Mathematical Reasoning | | | |
| Maths Core Options Unit** | | | | |
| OR | | | | |
| MXB101 | Probability and Stochastic Modelling 1 | | | |
| OR | | | | |
| MXB103 | Introductory Computational Mathematics | | | |
| Year 1 Semester 2 | | | | |
| MXB105 | Calculus of One and Two Variables | | | |
| MXB106 | Linear Algebra and Differential Equations | | | |
| (PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors) | | | | |

| Year 2 Semester 1 | | | |
|---|---|--|--|
| MXB101 | Probability and Stochastic Modelling 1 | | |
| OR Maths Core Options Unit** (select if completed MXB101 in first year) | | | |
| MXB103 Introductory Computational Mathematics | | | |
| | Core Options Unit** (select if MXB103 in first year) | | |
| Year 2 Sem | ester 2 | | |
| MXB107 | Introduction to Statistical Modelling | | |
| Maths Core | Options Unit | | |
| Year 3 Sem | ester 1 | | |
| MXB201 | Advanced Linear Algebra | | |
| MXB241 | Probability and Stochastic Modelling 2 | | |
| OR | | | |
| CAB201 | Programming Principles | | |
| Year 3 Sem | ester 2 | | |
| MXB202 | Advanced Calculus | | |
| MXB232 | Introduction to Operations | | |
| Year 4 Semester 1 | | | |
| MXB332 | Optimisation Modelling | | |
| MXB341 | Statistical Inference | | |
| OR | | | |
| MXB351 | Coding Theory and Graph Theory | | |
| Year 4 Semester 2 | | | |
| MXB334 | Operations Research for Stochastic Processes | | |
| MXB335 | Advanced Optimisation Modelling | | |
| NOTE: | | | |
| ** Only TWO (2) Option units may be taken in these 4 unit-slots. | | | |

Semesters

- Statistical Science Major unit set:
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- <u>Year 4 Semester 1</u>
 <u>Year 4 Semester 2</u>
- NOTE:
- NOTE:

| Code | Title | | |
|--|-------|--|--|
| Statistical Science Major unit set: | | | |
| Year 1 Semester 1 | | | |
| MXB102 Abstract Mathematical Reasoning | | | |
| Maths Core Options Unit** | | | |
| OR | | | |
| MXB101 Probability and Stochastic Modelling 1 | | | |

| OR | | | | |
|--|---|--|--|--|
| MXB103 Introductory Computational Mathematics | | | | |
| Year 1 Semester 2 | | | | |
| MXB105 | Calculus of One and Two | | | |
| MXB106 Linear Algebra and Differential Equations | | | | |
| (PLEASE NOTE: you will need to nominate your Maths major in your Study Plan to select MXB105 and MXB106. These units are common to all three Maths majors) | | | | |
| Year 2 Sem | ester 1 | | | |
| MXB101 | Probability and Stochastic Modelling 1 | | | |
| | Core Options Unit** (select if MXB101 in first year) | | | |
| MXB103 | Introductory Computational Mathematics | | | |
| OR Maths Core Options Unit** (select if completed MXB103 in first year) | | | | |
| Year 2 Sem | ester 2 | | | |
| MXB107 Introduction to Statistical Modelling | | | | |
| Maths Core | Options Unit** | | | |
| Year 3 Sem | ester 1 | | | |
| MXB201 | Advanced Linear Algebra | | | |
| MXB242 | Regression and Design | | | |
| Year 3 Sem | | | | |
| MXB202 | Advanced Calculus | | | |
| MXB241 | Probability and Stochastic Modelling 2 | | | |
| Year 4 Semester 1 | | | | |
| MXB341 | Statistical Inference | | | |
| MXB342 | | | | |
| Year 4 Sem | ester 2 | | | |
| MXB343 | Modelling Dependent Data | | | |
| MXB344 | Generalised Linear Models | | | |
| NOTE: | | | | |
| ** Only TWO (2) Option units may be | | | | |
| taken in these 4 unit-slots | | | | |

taken in these 4 unit-slots.

1

Semesters

| ٠ | Year | 1 - Se | mester |
|---|------|--------|--------|
| | | | |

- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
 Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title |
|---------------------|----------------------------------|
| Year 1 - Semester 1 | |
| EGB113 | Energy in Engineering Systems |



| MZB125 | Introductory Engineering Mathematics |
|-----------------|--|
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semest | er 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | er 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | er 2 |
| EGB120 | Foundations of Electrical Engineering |
| Foundation Unit | Option |
| Year 3 - Semest | er 1 |
| EGB261 | Unit Operations |
| EGB323 | Fluid Mechanics |
| Year 3 - Semest | er 2 |
| CVB101 | General Chemistry |
| EGB322 | Thermodynamics |
| Year 4 - Semest | |
| EGB262 | Process Principles |
| EGB362 | Operations Management and Process Economics |
| Year 4 - Semest | er 2 |
| EGB364 | Process Modelling |
| EGH411 | Industrial Chemistry |
| Year 5 - Semest | |
| EGB361 | Minerals and Minerals Processing |
| EGH400-1 | Research Project 1 |
| EGH404 | Research in Engineering Practice |
| EGH463 | Plant and Process Design |
| Year 5 - Semest | er 2 |
| EGH400-2 | Research Project 2 |
| EGH422 | Advanced Thermodynamics |
| EGH423 | Fluids Dynamics |
| EGH462 | Process Control |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
 Year 3 Semester 1
 Year 3 Semester 2
 Year 4, Semester 1
 Year 4, Semester 1

- Year 4 Semester 2
 Year 5 Semester 1

• Year 5 - Semester 2

| Code | Title |
|---------------------------|--|
| Year 1 - Semest | |
| | Energy in Engineering |
| EGB113 | Systems |
| | Introductory |
| MZB125 | Engineering Mathematics |
| OR | Mathematics |
| | Computational |
| MXB161 | Explorations |
| Year 1 - Semest | er 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | er 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | |
| EGB123 | Civil Engineering Systems |
| Foundation Unit | Option |
| Year 3 - Semest | er 1 |
| EGB270 | Civil Engineering Materials |
| EGB272 | Traffic and Transport Engineering |
| Year 3 - Semest | er 2 |
| EGB273 | Principles of Construction |
| EGB373 | Geotechnical |
| | Engineering |
| Year 4, Semeste | |
| EGB275 | Structural Mechanics |
| EGB371 Year 4 - Semest | Engineering Hydraulics |
| EGB376 | Steel Design |
| | Advanced Water |
| EGH471 | Engineering |
| Year 5 - Semest | er 1 |
| EGB375 | Design of Concrete Structures |
| EGH400-1 | Research Project 1 |
| | Research in |
| EGH404 | Engineering Practice Advanced Geotechnical |
| EGH473 | Engineering |
| Year 5 - Semest | |
| EGH400-2 | Research Project 2 |
| EGH472 | Advanced Highway and Pavement Engineering |
| EGH475 | Advanced Concrete Structures |

| EGH479 | Advances in Civil Engineering Practice |
|--|---|
| Semesters | |
| Year 1 - Se Year 1 - Se | emester 1 emester 2 |
| Year 1 - Se Year 2 - Se | emester 1 |
| Year 2 - Se | emester 2 |
| Year 3 - Se Year 3 - Se | emester 1 |
| • <u>Year 4 - Se</u> | |
| Year 4 - Se Year 5 - Se | emester 2 |
| Year 5 - Se Year 5 - Se | emester 1 emester 2 |
| | |
| Code | Title |
| Year 1 - Semest | |
| EGB113 | Energy in Engineering Systems |
| MZD405 | Introductory |
| MZB125 | Engineering Mathematics |
| OR | |
| | Computational |
| MXB161 | Explorations |
| Year 1 - Semest | |
| EGB100 | Engineering Sustainability and |
| EGB100 | Professional Practice |
| | Engineering |
| MZB126 | Computation |
| Year 2 - Semest | |
| E00444 | Foundation of |
| EGB111 | Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | er 2 |
| EGB120 | Foundations of |
| LODIZO | Electrical Engineering |
| Foundation Unit | - |
| Year 3 - Semest | er 1 |
| CAB202 | Microprocessors and Digital Systems |
| EGB242 | Signal Analysis |
| Year 3 - Semest | |
| CAB201 | Programming Principles |
| | ctrical Option Unit |
| Year 4 - Semest | er 1 |
| EGB240 | Electronic Design |
| Intermediate Sof | ftware Option Unit |
| Year 4 - Semest | er 2 |
| CAB403 | Systems Programming |
| Intermediate Ele Option Unit | ctrical or Software |
| Year 5 - Semest | er 1 |
| EGH404 | Research in Engineering Practice |
| EGH400-1 | Research Project 1 |
| Advanced Electr | ical or Software Option |
| | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE40&courseID=32940. CRICOS No.00213J QU

| Unit | |
|---------------------------------|----------------------------|
| EGH456 | Embedded Systems |
| Year 5 - Semester 2 | |
| EGH400-2 | Research Project 2 |
| EGH455 | Advanced Systems Design |
| Advanced Electrical Option Unit | |
| Advanced Software Option Unit | |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 Year 2 Semester 2 .
- .
- Year 3 Semester 1 ٠
- Year 3 Semester 2 Year 4 - Semester 1
- Year 4 Semester 2 .
- Year 5 Semester 1
- ٠ Year 5 - Semester 2

Code Title Year 1 - Semester 1 Energy in Engineering **EGB113** Systems Introductory Engineering **MZB125 Mathematics** OR Computational **MXB161** Explorations Year 1 - Semester 2 Engineering Sustainability **EGB100** and Professional Practice **MZB126 Engineering Computation** Year 2 - Semester 1 Foundation of **EGB111 Engineering Design** EGB121 **Engineering Mechanics** Year 2 - Semester 2 Microprocessors and CAB202 **Digital Systems** Foundations of Electrical **EGB120** Engineering Year 3 - Semester 1 **EGB240 Electronic Design** Electromagnetics and EGB241 Machines Year 3 - Semester 2 EGB242 Signal Analysis Intermediate Electrical Option Unit (1) EGB348 can be selected from the list. A requisite waiver for this unit will be granted if you are enrolled in EGB242 at the same time . Year 4 - Semester 1

| EGB340 | Design and Practice |
|---|---------------------|
| Foundation Unit Option | |
| Year 4 - Semester 2 | |
| Intermediate Electrical Option Unit (2) | |

| Year 5 - Semester 1 | | |
|-------------------------------------|----------------------------------|--|
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| Advanced Electrical Option Unit (1) | | |
| Advanced Electrical Option Unit (2) | | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| Advanced Electrical Option Unit (3) | | |
| Advanced Electrical Option Unit (4) | | |
| Advanced Electrical Option Unit (5) | | |
| | | |

Intermediate Electrical Option Unit (3)

Semesters

- Year 1 Semester 1
- Year 1 Semester 2 .
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title | |
|---------------------|--|--|
| Year 1 - Semest | ter 1 | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | ter 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | ter 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | ter 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit | Option | |
| Year 3 - Semest | ter 1 | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB240 | Electronic Design | |
| Year 3 - Semester 2 | | |
| EGB242 | Signal Analysis | |
| | ectrical Option Unit | |
| Year 4 - Semester 1 | | |
| EGB243 | Aircraft Systems and Flight | |
| EGB349 | Systems Engineering | |

| | and Design Project | |
|---------------------------------|---------------------------------------|--|
| Year 4 - Semest | er 2 | |
| EGB345 | Control and Dynamic Systems | |
| EGB346 | Unmanned Aircraft Systems | |
| Year 5 - Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH446 | Autonomous Systems | |
| Advanced Electrical Option Unit | | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH445 | Modern Control | |
| EGH450 | Advanced Unmanned Aircraft Systems | |
| Advanced Electrical Option Unit | | |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 ٠
- Year 2 Semester 2 •
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title | | |
|------------------------|--|--|--|
| Year 1 - Semest | Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | | |
| MZB125 | Introductory Engineering Mathematics | | |
| OR | | | |
| MXB161 | Computational Explorations | | |
| Year 1 - Semest | er 2 | | |
| EGB100 | Engineering Sustainability and Professional Practice | | |
| MZB126 | Engineering Computation | | |
| Year 2 - Semest | er 1 | | |
| EGB111 | Foundation of Engineering Design | | |
| EGB121 | Engineering Mechanics | | |
| Year 2 - Semester 2 | | | |
| EGB120 | Foundations of Electrical Engineering | | |
| Foundation Unit Option | | | |
| Year 3 - Semester 1 | | | |
| EGB210 | Fundamentals of Mechanical Design | | |
| EGB214 | Materials and | | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE40&courseID=32940. CRICOS No.00213J



| | Manufacturing | |
|---------------------|-------------------------------------|--|
| Year 3 - Semest | ter 2 | |
| EGB211 | Dynamics | |
| EGB314 | Strength of Materials | |
| Year 4 - Semester 1 | | |
| EGB321 | Dynamics of Machines | |
| EGB323 | Fluid Mechanics | |
| Year 4 - Semester 2 | | |
| EGB322 | Thermodynamics | |
| EGH404 | Research in Engineering Practice | |
| Year 5 - Semest | ter 1 | |
| EGB316 | Design of Machine Elements | |
| EGH400-1 | Research Project 1 | |
| EGH414 | Stress Analysis | |
| EGH421 | Vibration and Control | |
| Year 5 - Semest | ter 2 | |
| EGH400-2 | Research Project 2 | |
| EGH420 | Mechanical Systems Design | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2 Year 3 Semester 1 ٠ .
- Year 3 - Semester 2
- Year 4 Semester 1
- •
- Year 4 Semester 2 Year 5 Semester 1 ٠
- Year 5 Semester 2

| Code | Title | |
|---------------------|--|--|
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semester 2 | | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semester 1 | | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semester 2 | | |
| EGB120 | Foundations of | |

| | Electrical Engineering | |
|---------------------|--|--|
| Foundation Unit | • • | |
| Year 3 - Semester 1 | | |
| EGB211 | Dynamics | |
| EGB242 | Signal Analysis | |
| Year 3 - Semest | er 2 | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB345 | Control and Dynamic Systems | |
| Year 4 - Semest | er 1 | |
| EGB220 | Mechatronics Design 1 | |
| EGB321 | Dynamics of Machines | |
| Year 4 - Semester 2 | | |
| EGB320 | Mechatronics Design 2 | |
| Intermediate Ele | ctrical Option Unit | |
| Year 5 - Semest | er 1 | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH419 | Mechatronics Design 3 | |
| EGH446 | Autonomous Systems | |
| Year 5 - Semest | er 2 | |
| EGH400-2 | Research Project 2 | |
| EGH413 | Advanced Dynamics | |
| EGH445 | Modern Control | |
| Advanced Electr | ical Option Unit | |

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
 Year 2 Semester 2
- Year 3 Semester 1 Year 3 - Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title |
|---------------------|--|
| Year 1 - Semester 1 | |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semest | er 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semester 1 | |
| EGB111 | Foundation of Engineering Design |

| EGB121 Engineering Mecha | anics | |
|---|-------|--|
| Year 2 - Semester 2 | | |
| EGB120 Foundations of Electrical Engineer | ing | |
| Foundation Unit Option | | |
| Year 3 - Semester 1 | | |
| EGB210 Fundamentals of Mechanical Design | ı | |
| LSB131 Anatomy | | |
| Year 3 - Semester 2 | | |
| EGB211 Dynamics | | |
| LSB231 Physiology | | |
| Year 4 - Semester 1 | | |
| EGB214 Materials and Manufacturing | | |
| EGB323 Fluid Mechanics | | |
| Year 4 - Semester 2 | | |
| EGB314 Strength of Materia | als | |
| EGH404 Research in Engineering Practic | се | |
| Year 5 - Semester 1 | | |
| EGB319 BioDesign | | |
| EGH400-1 Research Project 1 | l | |
| | | |
| EGH414 Stress Analysis | | |
| EGH418 Biomechanics | | |
| | | |
| EGH418 Biomechanics | 2 | |
| EGH418BiomechanicsYear 5 - Semester 2 | 2 | |
| EGH418BiomechanicsYear 5 - Semester 2EGH400-2Research Project 2 | | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE40&courseID=32940. CRICOS No.00213J



QUT

Bachelor of Engineering (Honours)/Bachelor of Information Technology

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | SE60 |
| CRICOS | 084923F |
| Duration (full-time) | 5 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$32,400 per year full-time (96 credit points) |
| Total credit points | 480 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry - email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Thomas Rainey (Chemical Process), Dr Brian Lee (Civil); Dr Wayne Kelly (Computer & Software Systems); Dr Jacob Coetzee (Electrical); Dr Aaron Mcfadyen (Electrical & Aerospace); Professor Ted Steinberg (Mechanical); Associate Professor Jason Ford (Mechatronics); Dr Devakar Epari (Medical); Dr Wayne Kelly (Computer Science); and Dr Erwin Fielt (Information Systems). |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours) in SE60, students are required to complete 288 credit points of course units, as outlined below:

- First year: four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course structure

To graduate with a Bachelor of Engineering (Honours) in SE60, students are required to complete 288 credit points of course units, as outlined below:

- First year: four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

Sample Structure PLEASE NOTE:

For students taking the IT: Computer Science major with Engineering: Computer & Software Systems major, please refer to the "IT Units: Computer Science/Eng Computer Software Sys Majors ONLY (SE60MJR-CSSES)" structure instead.

Semesters

- Semester 1 (February) **commencements**
- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2 Year 3, Semester 1
- •
- Year 3, Semester 2
- Year 4, Semester 1 Year 4, Semester 2
- Semester 2 (July) commencements •
- Year 1, Semester 2
- Year 2, Semester 1
- ٠ Year 2, Semester 2
- . Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1 •
- Year 4, Semester 2
- Year 5, Semester 1
- **Computer Science Major Unit Options**

Code Title

| 00000 | 11110 | |
|-------------------------------------|---|--|
| Semester 1 (February) commencements | | |
| Year 1, Semester 1 | | |
| IFB101 | Impact of IT | |
| IFB102 | Computer Technology Fundamentals | |
| OR | | |
| IFB130 | Database Management | |
| Year 1, Semester 2 | | |
| Year 1, Se | emester 2 | |
| Year 1, Se IFB130 | emester 2 Database Management | |
| | | |
| IFB130 | | |
| IFB130 OR | Database Management Computer Technology | |
| IFB130 OR IFB102 | Database Management Computer Technology Fundamentals Building IT Systems | |



IFB103 Designing for IT For Engineering students majoring in: Civil, Mechanical, Medical or Process/Chemical Process major -IT Core Unit Option For Engineering students majoring in: Electrical, Electrical & Aerospace or Mechatronics major -CAB201 Programming Principles Year 2, Semester 2 For Engineering students majoring in: Civil. Mechanical. Medical or Process/Chemical Process major -CAB201 Programming Principles Microprocessors and Digital CAB202 Systems (Note: Select CAB202 from the Computer Science Major Option list this is compulsory in the IT component if majoring in these engineering majors.) For Engineering students majoring in: Electrical, Electrical & Aerospace or Mechatronics major -**IT Core Unit Option** Computer Science Major Unit Option 1 (Note: CAB202 will be available as core in the engineering component if majoring in these engineering majors.) Year 3, Semester 1 CAB203 Discrete Structures CAB302 Software Development Year 3, Semester 2 CAB303 Networks IT Project Design and **IFB299** Development Year 4, Semester 1 CAB301 Algorithms and Complexity **IFB398** Capstone Project (Phase 1) Year 4, Semester 2 **IFB399** Capstone Project (Phase 2) Computer Science Major Unit Option 2 Semester 2 (July) commencements Year 1. Semester 2 IFB101 Impact of IT Computer Technology IFB102 **Fundamentals** Year 2, Semester 1 **IFB103** Designing for IT IFB104 **Building IT Systems** Year 2, Semester 2 CAB201 **Programming Principles IFB130 Database Management** Year 3, Semester 1 CAB203 **Discrete Structures** For Engineering students majoring in:

| CAB202 | Microprocessors and Digital Systems | |
|---|--|--|
| For Engineering students majoring in: Electrical, Electrical & Aerospace or Mechatronics major - | | |
| | Science Major Unit Option 1 | |
| Year 3, Se | emester 2 | |
| CAB303 | Networks | |
| IFB299 | IT Project Design and Development | |
| Year 4, Se | | |
| CAB301 | Algorithms and Complexity | |
| CAB302 | Software Development | |
| Year 4, Se | | |
| IFB398 | Capstone Project (Phase 1) | |
| IT Core U | nit Option | |
| OR | | |
| | Science Major Unit Option 2 | |
| Year 5, Se IFB399 | | |
| | Capstone Project (Phase 2) | |
| OR | Science Major Unit Option 2 | |
| - | nit Ontion | |
| IT Core U | | |
| (Select IT Core Unit Option here, if not | | |
| | previously.) | |
| selected p | oreviously.) Science Major Unit Options | |
| selected p | | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will co | Science Major Unit Options Microprocessors and Digital | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will co | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your | |
| selected p Computer CAB202 (CAB202 Engineerin Software s & Aerospa you will co Engineerin | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ng component.) Fundamentals of Data | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will co Engineerin CAB220 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ng component.) Fundamentals of Data Science | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will cc Engineerin CAB220 CAB320 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ng component.) Fundamentals of Data Science Artificial Intelligence | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will cc Engineerin CAB220 CAB320 CAB340 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ng component.) Fundamentals of Data Science Artificial Intelligence Cryptography High Performance and | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will co Engineerin CAB220 CAB320 CAB340 CAB401 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ng component.) Fundamentals of Data Science Artificial Intelligence Cryptography High Performance and Parallel Computing | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will cc Engineerin CAB220 CAB320 CAB320 CAB340 CAB401 CAB402 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ing major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which implete CAB202 in your ing component.) Fundamentals of Data Science Artificial Intelligence Cryptography High Performance and Parallel Computing Programming Paradigms | |
| Selected p Computer CAB202 (CAB202 Engineerin Software S & Aerospa you will cc Engineerin CAB220 CAB320 CAB320 CAB340 CAB401 CAB402 CAB403 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ing major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ing component.) Fundamentals of Data Science Artificial Intelligence Cryptography High Performance and Parallel Computing Programming Paradigms Systems Programming Data and Information | |
| Selected p Computer CAB202 (CAB202 Engineerin Software & Aerospa you will co Engineerin CAB220 CAB320 CAB320 CAB340 CAB401 CAB402 CAB403 CAB403 | Science Major Unit Options Microprocessors and Digital Systems is CORE unless your ng major is in Computer & Systems, Electrical, Electrical ace or Mechatronics in which omplete CAB202 in your ng component.) Fundamentals of Data Science Artificial Intelligence Cryptography High Performance and Parallel Computing Programming Paradigms Systems Programming Data and Information Integration | |

This major option MUST be selected ONLY if you are taking a IT Computer Science major and Engineering Computer & Software Systems Major.

Semesters

- <u>Semester 1 (February)</u>
- commencements Year 1, Semester 1

| | 3, Semester 1 | |
|--|--|--|
| Year 3, Semester 2 Year 4, Semester 1 | | |
| Year 4, Semester 1 Year 4, Semester 2 | | |
| Year | 5, Semester 1 | |
| | puter Science Major Unit | |
| <u>Optic</u> | <u>ons</u> | |
| Code | Title | |
| Semester | 1 (February) commencements | |
| Year 1, Se | emester 1 | |
| IFB101 | Impact of IT | |
| IFB102 | Computer Technology | |
| IFD102 | Fundamentals | |
| Year 1, Se | emester 2 | |
| IFB130 | Database Management | |
| IFB104 | Building IT Systems | |
| Year 2, Se | emester 1 | |
| IFB103 | Designing for IT | |
| IT Core U | nit Option | |
| Year 2, Se | • | |
| | Science Major Unit Option 1 | |
| - | Science Major Unit Option 2 | |
| | and CAB202 are core to EN01 | |
| | Software Systems Major | |
| Year 3, Se | | |
| CAB203 | | |
| CAB302 | Software Development | |
| Year 3, Se | | |
| CAB303 | Networks | |
| | IT Project Design and | |
| IFB299 | Development | |
| Year 4, Se | · · | |
| CAB301 | Algorithms and Complexity | |
| IFB398 | Capstone Project (Phase 1) | |
| Year 4, Se | | |
| IFB399 | Capstone Project (Phase 2) | |
| | Science Major Unit Option 3 | |
| | 2 (July) commencements | |
| Year 1, Se | | |
| | | |
| IFB101 | Impact of IT | |
| IFB102 | Computer Technology Fundamentals | |
| Year 2, Se | emester 1 | |
| IFB103 | Designing for IT | |
| IFB104 | Building IT Systems | |
| Year 2, Se | emester 2 | |
| IFB130 | Database Management | |
| | | |
| | QU | |
| university | for the real world [®] | |

Year 1, Semester 2 Year 2, Semester 1

Year 2, Semester 2

Year 3, Semester 1

Year 3, Semester 2

Year 4, Semester 1 Year 4, Semester 2

Year 1, Semester 2

Year 2, Semester 1

Year 2, Semester 2

Semester 2 (July) commencements

Civil, Mechanical, Medical or

Process/Chemical Process major -



| Computer | Science Major Unit Option 1 | |
|---|---|--|
| Year 3, Se | emester 1 | |
| CAB203 | Discrete Structures | |
| Computer | Science Major Unit Option 2 | |
| Year 3, Se | emester 2 | |
| CAB303 | Networks | |
| IFB299 | IT Project Design and Development | |
| Year 4, Se | emester 1 | |
| CAB301 | Algorithms and Complexity | |
| CAB302 | Software Development | |
| Year 4, Se | emester 2 | |
| IFB398 | Capstone Project (Phase 1) | |
| IT Core U | nit Option | |
| OR | | |
| Computer | Science Major Unit Option 3 | |
| Year 5, Se | emester 1 | |
| IFB399 | Capstone Project (Phase 2) | |
| Computer | Science Major Unit Option 3 | |
| OR | | |
| IT Core U | nit Option | |
| | Core Unit Option here, if not | |
| selected previously.) | | |
| | | |
| | oreviously.) Science Major Unit Options | |
| Computer As CAB20 | Science Major Unit Options 11 and CAB202 are core to | |
| Computer As CAB20 EN01 Cor | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems | |
| Computer As CAB20 EN01 Con Major, SE | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 | |
| Computer As CAB20 EN01 Con Major, SE undertake | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti and CAB2 | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti and CAB2 CAB310 | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 202. Interaction and Experience Design | |
| Computer As CAB20 EN01 Cor Major, SE undertake Major opti and CAB2 CAB310 CAB320 | Science Major Unit Options 1 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence | |
| Computer As CAB20 EN01 Com Major, SE undertake Major opti and CAB2 CAB310 CAB320 CAB330 | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB330 CAB340 | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and | |
| Computer As CAB20 EN01 Cor Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB330 CAB340 CAB401 | Science Major Unit Options 1 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and Parallel Computing | |
| Computer As CAB20 EN01 Com Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB330 CAB340 CAB401 CAB402 | Science Major Unit Options 1 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and Parallel Computing Programming Paradigms | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB320 CAB330 CAB340 CAB401 CAB402 CAB420 | Science Major Unit Options 11 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and Parallel Computing Programming Paradigms Machine Learning Data and Information | |
| Computer As CAB20 EN01 Cor Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB320 CAB330 CAB340 CAB401 CAB402 CAB420 CAB430 | Science Major Unit Options 1 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and Parallel Computing Programming Paradigms Machine Learning Data and Information Integration | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB320 CAB330 CAB340 CAB401 CAB402 CAB420 CAB420 CAB430 | Science Major Unit Options 1 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and Parallel Computing Programming Paradigms Machine Learning Data and Information Integration Search Engine Technology | |
| Computer As CAB20 EN01 Con Major, SE undertake Major opti and CAB20 CAB310 CAB320 CAB320 CAB330 CAB340 CAB401 CAB402 CAB402 CAB420 CAB430 CAB431 CAB432 | Science Major Unit Options 1 and CAB202 are core to nputer Software Systems 60MJR-CSSECS students will two extra Computer Science on units in place of CAB201 102. Interaction and Experience Design Artificial Intelligence Data and Web Analytics Cryptography High Performance and Parallel Computing Programming Paradigms Machine Learning Data and Information Integration Search Engine Technology Cloud Computing Network and Systems | |

Semesters

- Semester 1 (February)
- commencements Year 1, Semester 1 ٠
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2 ٠
- ٠ •
- Year 4, Semester 1 Year 4, Semester 2 •
- Semester 2 (July) commencements •

| Year 1, Semester 2 | | |
|---|---|--|
| Year 2, Semester 1 | | |
| Year 2, Semester 2 | | |
| <u>Year 3, Semester 1</u> <u>Year 3, Semester 2</u> | | |
| Year 3, Semester 2 Year 4, Semester 1 | | |
| <u>Year 4, Semester 1</u> <u>Year 4, Semester 2</u> | | |
| Year 5, Semes | ster 1 | |
| | | |
| Code | Title | |
| Semester 1 (Februa | ary) commencements | |
| Year 1, Semester 1 | | |
| IFB101 | Impact of IT | |
| | Computer | |
| IFB102 | Technology | |
| 11 2 102 | Fundamentals | |
| Year 1, Semester 2 | | |
| | | |
| IFB104 | Building IT Systems | |
| IFB130 | Database | |
| | Management | |
| Year 2, Semester 1 | | |
| IFB103 | Designing for IT | |
| IT Core Unit Option | | |
| Year 2, Semester 2 | | |
| | | |
| IAB201 | Modelling Information | |
| IADZU I | Systems | |
| | , | |
| IAB202 | Business of Information | |
| IADZUZ | | |
| | | |
| Voor 2 Somestor 1 | Technology | |
| Year 3, Semester 1 | | |
| Year 3, Semester 1 IAB203 | Business Process | |
| IAB203 | Business Process Modelling | |
| IAB203 IAB204 | Business Process Modelling Business Analysis | |
| IAB203 | Business Process Modelling Business Analysis | |
| IAB203 IAB204 | Business Process Modelling Business Analysis | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 | Business Process Modelling Business Analysis Corporate Systems | |
| IAB203 IAB204 Year 3, Semester 2 | Business Process Modelling Business Analysis | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 | Business Process Modelling Business Analysis Corporate Systems IT Project Design | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project | |
| IAB203IAB204Year 3, Semester 2IAB205IFB299Year 4, Semester 1IFB398Select one of:IAB302IAB303IAB304 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management | |
| IAB203IAB204Year 3, Semester 2IAB205IFB299Year 4, Semester 1IFB398Select one of:IAB302IAB303IAB304 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 IAB301 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 IAB301 IFB399 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management Enterprise Architecture Capstone Project (Phase 2) | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 IAB301 IFB399 Semester 2 (July) of | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management Enterprise Architecture Capstone Project (Phase 2) | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 IAB304 Year 4, Semester 2 IAB304 Year 4, Semester 2 IAB301 IFB399 Semester 2 (July) of Year 1, Semester 2 | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management Enterprise Architecture Capstone Project (Phase 2) Capstone Project | |
| IAB203 IAB204 Year 3, Semester 2 IAB205 IFB299 Year 4, Semester 1 IFB398 Select one of: IAB302 IAB303 IAB304 Year 4, Semester 2 IAB301 IFB399 Semester 2 (July) of | Business Process Modelling Business Analysis Corporate Systems IT Project Design and Development Capstone Project (Phase 1) Information Systems Consulting Business Intelligence Project Management Enterprise Architecture Capstone Project (Phase 2) | |

| Year 2, Semester 1 | | | |
|---------------------|--|--|--|
| IFB103 | Designing for IT | | |
| IFB104 | Building IT Systems | | |
| Year 2, Semester 2 | | | |
| IFB130 | Database Management | | |
| IAB201 | Modelling Information Systems | | |
| Year 3, Semester 1 | | | |
| IAB202 | Business of Information Technology | | |
| IT Core Unit Option | | | |
| Year 3, Semester 2 | | | |
| IAB204 | Business Analysis | | |
| IAB205 | Corporate Systems | | |
| Year 4, Semester 1 | | | |
| IAB203 | Business Process Modelling | | |
| IFB299 | IT Project Design and Development | | |
| Year 4, Semester 2 | | | |
| IAB301 | Enterprise Architecture | | |
| IFB398 | Capstone Project (Phase 1) | | |
| Year 5, Semester 1 | | | |
| IFB399 | Capstone Project (Phase 2) | | |
| Select ONE of: | | | |
| IAB302 | Information Systems Consulting | | |
| IAB303 | Business Intelligence | | |
| IAB304 | Project Management | | |

Semesters

- Semester 1 (February) <u>commencements</u> Year 1 - Semester 1 Year 1 - Semester 2
 Year 2 - Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
 Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1 Year 5 - Semester 2

| Code | Title |
|-------------------------------------|--|
| Semester 1 (February) commencements | |
| Year 1 - Semester 1 | |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |

IFB102

Technology

Fundamentals



| | 3 |
|-----------------|--|
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semest | ter 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | ter 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | ter 2 |
| EGB120 | Foundations of Electrical Engineering |
| Foundation Unit | |
| Year 3 - Semest | ter 1 |
| EGB261 | Unit Operations |
| EGB323 | Fluid Mechanics |
| Year 3 - Semest | ter 2 |
| CVB101 | General Chemistry |
| EGB322 | Thermodynamics |
| Year 4 - Semest | - |
| EGB262 | Process Principles |
| EGB362 | Operations Management and Process Economics |
| Year 4 - Semest | ter 2 |
| EGB364 | Process Modelling |
| EGH411 | Industrial Chemistry |
| Year 5 - Semest | ter 1 |
| EGB361 | Minerals and Minerals Processing |
| EGH400-1 | Research Project 1 |
| EGH404 | Research in Engineering Practice |
| EGH463 | Plant and Process Design |
| Year 5 - Semest | ter 2 |
| EGH400-2 | Research Project 2 |
| EGH422 | Advanced Thermodynamics |
| EGH423 | Fluids Dynamics |
| EGH462 | Process Control |
| Semesters | |

| ٠ | Semester 1 (February) |
|---|-----------------------|
| | commencements |
| ٠ | Year 1 - Semester 1 |
| ٠ | Year 1 - Semester 2 |
| ٠ | Year 2 - Semester 1 |
| • | Year 2 - Semester 2 |

- Year 2 Semester 2
 Year 3 Semester 1
 Year 3 Semester 2
- Year 4, Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title |
|-----------------|--|
| Semester 1 (Feb | oruary) commencements |
| Year 1 - Semest | er 1 |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semest | er 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | er 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | |
| EGB123 | Civil Engineering Systems |
| Foundation Unit | • |
| Year 3 - Semest | |
| EGB270 | Civil Engineering Materials |
| EGB272 | Traffic and Transport Engineering |
| Year 3 - Semest | er 2 |
| EGB273 | Principles of Construction |
| EGB373 | Geotechnical Engineering |
| Year 4, Semeste | er 1 |
| EGB275 | Structural Mechanics |
| EGB371 | Engineering Hydraulics |
| Year 4 - Semest | er 2 |
| EGB376 | Steel Design |
| EGH471 | Advanced Water Engineering |
| Year 5 - Semest | |
| EGB375 | Design of Concrete Structures |
| EGH400-1 | Research Project 1 |
| EGH404 | Research in Engineering Practice |
| EGH473 | Advanced Geotechnical Engineering |
| Year 5 - Semest | er 2 |
| EGH400-2 | Research Project 2 |
| EGH472 | Advanced Highway and Pavement Engineering |
| EGH475 | Advanced Concrete Structures |
| EGH479 | Advances in Civil |

Practice a university for the **real** world



Engineering Practice

Semesters

• Semester 1 (February)

| 0.0.001 | manaamanta | |
|--|---|--|
| <u>commencements</u> <u>Year 1 - Semester 1</u> | | |
| Year 1 - Semester 1 Year 1 - Semester 2 | | |
| Year | <u>2 - Semester 1</u> | |
| • <u>Year</u> | <u>2 - Semester 2</u> | |
| <u>rear</u> Year | <u>3 - Semester 1</u> 3 - Semester 2 | |
| Year | 4 - Semester 1 | |
| • <u>Year</u> | <u>· 4 - Semester 2</u> · 5 - Semester 1 | |
| • <u>Year</u> | <u>: 5 - Semester 1</u> : <u>5 - Semester 2</u> | |
| | | |
| Code | Title | |
| | 1 (February) commencements | |
| Year 1 - S | Semester 1 | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year <u>1 - S</u> | Semester 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - S | Semester 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - S | Semester 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundatio | on Unit Option | |
| Year 3 - S | Semester 1 | |
| 040000 | Microprocessors and Digital | |
| CAB202 | Systems | |
| EGB242 | Signal Analysis | |
| Voor 2 C | | |
| Tear 5 - C | Semester 2 | |
| CAB201 | | |
| CAB201 | | |
| CAB201 Intermedia | Programming Principles | |
| CAB201 Intermedia | Programming Principles ate Electrical Option Unit | |
| CAB201 Intermedia Year 4 - S EGB240 | Programming Principles ate Electrical Option Unit Gemester 1 | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact So | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact So Faculty to | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact So Faculty to units you | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering be provided a list of additional | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact So Faculty to units you | Programming Principles ate Electrical Option Unit Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering be provided a list of additional can select from. | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact So Faculty to units you Year 4 - S CAB403 | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering be provided a list of additional can select from. Semester 2 | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact So Faculty to units you Year 4 - S CAB403 | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit ints with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering be provided a list of additional can select from. Semester 2 Systems Programming ate Electrical or Software | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact Se Faculty to units you Year 4 - S CAB403 Intermedia Option Ur | Programming Principles ate Electrical Option Unit Semester 1 Electronic Design ate Software Option Unit ints with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering be provided a list of additional can select from. Semester 2 Systems Programming ate Electrical or Software | |
| CAB201 Intermedia Year 4 - S EGB240 Intermedia For stude Major: CA the Comp contact Se Faculty to units you Year 4 - S CAB403 Intermedia Option Ur | Programming Principles ate Electrical Option Unit Electronic Design ate Software Option Unit nts with Computer Science B301 and CAB302 are core to uter Science Major. Please cience and Engineering be provided a list of additional can select from. Semester 2 Systems Programming ate Electrical or Software nit | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE60&courseID=32942. CRICOS No.00213J

| EGH400 -1 | Research Project 1 | |
|--|-------------------------|--|
| Advanced Electrical or Software Option Unit | | |
| EGH456 | Embedded Systems | |
| Year 5 - Semester 2 | | |
| EGH400 -2 | Research Project 2 | |
| EGH455 | Advanced Systems Design | |
| Advanced Electrical Option Unit | | |
| Advanced Software Option Unit | | |

Semesters

- Semester 1 (February) commencements
- ٠ Year 1 - Semester 1
- •
- Year 1 Semester 2 Year 2 Semester 1 .
- Year 2 Semester 2 •
- Year 3 Semester 1 ٠
- •
- Year 3 Semester 2 Year 4 Semester 1 •
- Year 4 Semester 2 •
- Year 5 - Semester 1
- Year 5 - Semester 2

| Code | Title | |
|---|--|--|
| Semester 1 (February) commencements | | |
| Year 1 - Seme | ester 1 | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Seme | ester 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Seme | ester 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Seme | ester 2 | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB120 | Foundations of Electrical Engineering | |
| Year 3 - Seme | ester 1 | |
| EGB240 | Electronic Design | |
| EGB241 | Electromagnetics and Machines | |
| Year 3 - Semester 2 | | |
| EGB242 | Signal Analysis | |
| Intermediate E | Electrical Option Unit (1) | |
| EGB348 can be selected from the list. A requisite waiver for this unit will be granted if you are enrolled in EGB242 at the same time . | | |

| Year 4 - Seme EGB340 | Design and Practice | |
|---|-------------------------------------|--|
| Foundation Unit Option | | |
| Year 4 - Seme | ester 2 | |
| Intermediate Electrical Option Unit (2) | | |
| Intermediate Electrical Option Unit (3) | | |
| Year 5 - Seme | ester 1 | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| Advanced Ele | ctrical Option Unit (1) | |
| Advanced Electrical Option Unit (2) | | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| Advanced Electrical Option Unit (3) | | |
| Advanced Electrical Option Unit (4) | | |
| Advanced Electrical Option Unit (5) | | |
| | <u>r 1 (February)</u> cements | |

- <u>commencements</u>
 <u>Year 1 Semester 1</u>
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2 Year 3 Semester 1 ٠
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2 •
- Year 5 Semester 1 .
- Year 5 Semester 2

| Code | Title | |
|------------------------|--|--|
| Semester 1 (Feb | oruary) commencements | |
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | er 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semester 2 | | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit Option | | |
| Year 3 - Semester 1 | | |
| CAB202 | Microprocessors and Digital Systems | |

| EGB240 | Electronic Design | |
|-------------------------------------|---|--|
| Year 3 - Semest | ter 2 | |
| EGB242 | Signal Analysis | |
| Intermediate Electrical Option Unit | | |
| Year 4 - Semester 1 | | |
| EGB243 | Aircraft Systems and Flight | |
| EGB349 | Systems Engineering and Design Project | |
| Year 4 - Semest | ter 2 | |
| EGB345 | Control and Dynamic Systems | |
| EGB346 | Unmanned Aircraft Systems | |
| Year 5 - Semest | ter 1 | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH446 | Autonomous Systems | |
| Advanced Electrical Option Unit | | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH445 | Modern Control | |
| EGH450 | Advanced Unmanned Aircraft Systems | |
| Advanced Electrical Option Unit | | |

Semesters

- Semester 1 (February)
- <u>commencements</u>
- Year 1 Semester 1
 Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2 •
- Year 3 Semester 1 Year 3 Semester 2 •
- Year 4 Semester 1 • •
- Year 4 Semester 2
- Year 5 Semester 1 . .
- Year 5 Semester 2

| Code | Title | |
|-------------------------------------|--|--|
| Semester 1 (February) commencements | | |
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semester 1 | | |
| EGB111 | Foundation of | |
| | | |



| | 8 8 (| |
|------------------------|--|--|
| | Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | er 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit Option | | |
| Year 3 - Semest | er 1 | |
| EGB210 | Fundamentals of Mechanical Design | |
| EGB214 | Materials and Manufacturing | |
| Year 3 - Semest | er 2 | |
| EGB211 | Dynamics | |
| EGB314 | Strength of Materials | |
| Year 4 - Semest | er 1 | |
| EGB321 | Dynamics of Machines | |
| EGB323 | Fluid Mechanics | |
| Year 4 - Semest | er 2 | |
| EGB322 | Thermodynamics | |
| EGH404 | Research in Engineering Practice | |
| Year 5 - Semest | er 1 | |
| EGB316 | Design of Machine Elements | |
| EGH400-1 | Research Project 1 | |
| EGH414 | Stress Analysis | |
| EGH421 | Vibration and Control | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH420 | Mechanical Systems Design | |
| EGH422 | Advanced Thermodynamics | |
| | | |

Semesters

- Semester 1 (February)
- commencements
- Year 1 - Semester 1 Year 1 - Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- ٠ Year 3 - Semester 1
- Year 3 Semester 2 ٠
- Year 4 Semester 1 ٠
- Year 4 Semester 2 ٠
- Year 5 Semester 1 Year 5 Semester 2 • •

| Code | Title |
|-------------------------------------|--|
| Semester 1 (February) commencements | |
| Year 1 - Semester 1 | |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational |

| | Explorations | |
|---------------------------------|--|--|
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | er 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | er 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit | Option | |
| Year 3 - Semest | er 1 | |
| EGB211 | Dynamics | |
| EGB242 | Signal Analysis | |
| Year 3 - Semest | er 2 | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB345 | Control and Dynamic Systems | |
| Year 4 - Semester 1 | | |
| EGB220 | Mechatronics Design 1 | |
| EGB321 | Dynamics of Machines | |
| Year 4 - Semest | er 2 | |
| EGB320 | Mechatronics Design 2 | |
| Intermediate Ele | ctrical Option Unit | |
| Year 5 - Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH419 | Mechatronics Design 3 | |
| EGH446 | Autonomous Systems | |
| Year 5 - Semest | er 2 | |
| EGH400-2 | Research Project 2 | |
| EGH413 | Advanced Dynamics | |
| EGH445 | Modern Control | |
| Advanced Electrical Option Unit | | |

Semesters

- <u>Semester 1 (February)</u>
- <u>commencements</u>
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 Year 2 - Semester 2
- Year 3 - Semester 1
- Year 3 Semester 2 ٠
- Year 4 - Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
 Year 5 Semester 2

| Code | Title |
|---------------------|-----------------------|
| Semester 1 (Feb | oruary) commencements |
| Year 1 - Semester 1 | |
| EGB113 | Energy in Engineering |

| | Systems |
|--|---|
| | Introductory |
| MZB125 | Engineering Mathematics |
| OR | Mathomatioo |
| | Computational |
| MXB161 | Explorations |
| Year 1 - Semest | |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | er 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | er 2 |
| EGB120 | Foundations of Electrical Engineering |
| Foundation Unit | Option |
| Year 3 - Semest | er 1 |
| EGB210 | Fundamentals of Mechanical Design |
| LSB131 | Anatomy |
| Year 3 - Semest | er 2 |
| EGB211 | Dynamics |
| LSB231 | Physiology |
| Year 4 - Semest | |
| EGB214 | Materials and Manufacturing |
| EGB323 | |
| | Fluid Mechanics |
| Year 4 - Semest | |
| Year 4 - Semest EGB314 | |
| | er 2 |
| EGB314 | er 2 Strength of Materials Research in Engineering Practice |
| EGB314 EGH404 | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 EGH414 | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 Stress Analysis |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 EGH414 EGH418 | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 Stress Analysis Biomechanics |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 EGH414 EGH418 Year 5 - Semest | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 Stress Analysis Biomechanics er 2 |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 EGH414 EGH418 Year 5 - Semest EGH400-2 | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 Stress Analysis Biomechanics er 2 Research Project 2 |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 EGH414 EGH418 Year 5 - Semest | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 Stress Analysis Biomechanics er 2 Research Project 2 Biofluids |
| EGB314 EGH404 Year 5 - Semest EGB319 EGH400-1 EGH414 EGH418 Year 5 - Semest EGH400-2 | er 2 Strength of Materials Research in Engineering Practice er 1 BioDesign Research Project 1 Stress Analysis Biomechanics er 2 Research Project 2 |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE60&courseID=32942. CRICOS No.00213J

QUI

Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | SE80 |
| CRICOS | 084924E |
| Duration (full-time) | 5 years |
| OP | 10 |
| Rank | 78 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,200 per year full-time (96 credit points) |
| Total credit points | 480 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiries - (Engineering); Dr Graham Johnson (Science); email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Thomas Rainey (Chemical Process), Dr Brian Lee (Civil); Dr Wayne Kelly (Computer & Software Systems); Dr Jacob Coetzee (Electrical); Dr Aaron Mcfadyen (Electrical & Aerospace); Professor Ted Steinberg (Mechanical); Ass. Professor Jason Ford (Mechatronics); Dr Devakar Epari (Medical); Dr Marion Bateson (Biological Science); Dr James Blinco (Chemistry); Dr Luke Nothdurft (Earth Science); Dr Andrew Baker (Environmental Science); and Prof Nunzio Motto (Physics) |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
- Maths B

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA). Recommended study: Chemistry, Maths C and Physics.

International Subject prerequisites • Maths B

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies. Recommended study: Chemistry, Maths C and Physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure

To graduate with a Bachelor of Engineering (Honours) in SE80, students are required to complete 288 credit points of course units, as outlined below:

- First year: four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

International Course structure

To graduate with a Bachelor of Engineering (Honours) in SE80, students are required to complete 288 credit points of course units, as outlined below:

- First year: four (4) core units 48cp + two (2) discipline foundation units 24cp + two (2) option units 24cp (96 credit points)
- Major: one (1) block of eight (8) major units 96cp plus eight (8) honours-level units 96cp (192 credit points).

Honours units to consist of:

- Research methods 12cp
- Project 24cp
- 5 x advanced major units 60cp.

Sample Structure

- Semester 1 (February)
- commencements
- Year 1 Semester 1
 Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Semester 2 (July) commencements
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2
- Year 5, Semester 1

| Code | Title | |
|--------------------------|--|--|
| Semester 1 (Feb | ruary) commencements | |
| Year 1 Semester | 1 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 1 Semester | 2 | |
| Science Core Unit Option | | |
| Science Major Ur | nit Option | |
| Year 2 Semester | 1 | |
| SEB115 | Experimental Science | |
| SEB116 | Experimental Science 2 | |
| Year 2 Semester 2 | | |
| BVB101 | Foundations of Biology | |
| BVB102 | Evolution | |
| Year 3 Semester 1 | | |
| BVB202 | Experimental Design and Quantitative Methods | |
| BVB301 | Animal Biology | |
| Year 3 Semester 2 | | |



| BVB201 | Biological Processes | |
|---------------------------|--|--|
| BVB204 | Ecology | |
| Year 4 Semester | ÷. | |
| BVB203 | Plant Biology | |
| BVB305 | Microbiology and the Environment | |
| Year 4 Semester | 2 | |
| BVB304 | Integrative Biology | |
| BVB313 | Population Genetics and Molecular Ecology | |
| Semester 2 (July |) commencements | |
| Year 1, Semeste | r 2 | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 2, Semeste | r 1 | |
| SEB115 | Experimental Science 1 | |
| SEB116 | Experimental Science 2 | |
| Year 2, Semeste | r 2 | |
| BVB101 | Foundations of Biology | |
| BVB102 | Evolution | |
| Year 3, Semester 1 | | |
| BVB202 | Experimental Design and Quantitative Methods | |
| BVB301 | Animal Biology | |
| Year 3, Semeste | r 2 | |
| BVB201 | Biological Processes | |
| BVB204 | Ecology | |
| Year 4, Semeste | r 1 | |
| BVB203 | Plant Biology | |
| BVB305 | Microbiology and the Environment | |
| Year 4, Semeste | r 2 | |
| BVB304 | Integrative Biology | |
| BVB313 | Population Genetics and Molecular Ecology | |
| Year 5, Semester 1 | | |
| Science Core Unit Option | | |
| Science Major Unit Option | | |
| | | |

Semesters

- Semester 1 (February) commencements
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1 Year 2 Semester 2 ٠
- Year 3 Semester 1 •
- Year 3 Semester 2

- Year 4 Semester 1 Year 4 Semester 2 Semester 2 (July) commencements ٠
- Year 1, Semester 2 Year 2, Semester 1 ٠
- Year 2, Semester 2 •
- Year 3, Semester 1
- Year 3, Semester 2 Year 4, Semester 1 • ٠
- Year 4, Semester 2
- Year 5, Semester 1

| Code | Title |
|-------------------|---|
| Semester 1 (Febr | uary) commencements |
| Year 1 Semester | 1 |
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 1 Semester 2 | 2 |
| CVB101 | General Chemistry |
| CVB102 | Chemical Structure and Reactivity |
| Year 2 Semester | 1 |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| Year 2 Semester 2 | 2 |
| CVB210 | Chemical Measurement Science |
| Science Core Unit | t Option |
| Year 3 Semester | 1 |
| CVB201 | Inorganic Chemistry |
| CVB202 | Analytical Chemistry |
| Year 3 Semester 2 | 2 |
| CVB203 | Physical Chemistry |
| CVB204 | Organic Structure and Mechanisms |
| Year 4 Semester | 1 |
| CVB301 | Organic Chemistry: Strategies for Synthesis |
| CVB302 | Applied Physical Chemistry |
| Year 4 Semester 2 | 2 |
| CVB303 | Coordination Chemistry |
| CVB304 | Chemistry Research Project |
| Semester 2 (July) | commencements |
| Year 1, Semester | 2 |
| SEB104 | Grand Challenges in Science |
| SEB113 | Quantitative Methods in Science |
| Year 2, Semester | 1 |
| SEB115 | Experimental Science 1 |

| SEB116 | Experimental Science 2 | |
|--------------------------|---|--|
| Year 2, Semester | 2 | |
| CVB101 | General Chemistry | |
| CVB102 | Chemical Structure and Reactivity | |
| Year 3, Semester | 1 | |
| CVB201 | Inorganic Chemistry | |
| CVB202 | Analytical Chemistry | |
| Year 3, Semester | 2 | |
| CVB203 | Physical Chemistry | |
| CVB204 | Organic Structure and Mechanisms | |
| Year 4, Semester | 1 | |
| CVB301 | Organic Chemistry: Strategies for Synthesis | |
| CVB302 | Applied Physical Chemistry | |
| Year 4, Semester 2 | | |
| CVB210 | Chemical Measurement Science | |
| CVB303 | Coordination Chemistry | |
| Year 5, Semester | 1 | |
| CVB304 | Chemistry Research Project | |
| Science Core Unit Option | | |

Semesters

- <u>Semester 1 (February)</u> commencements
- Year 1 Semester 1
- Year 1 Semester 2 Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2 • Year 4 Semester 1
- Year 4 Semester 2
- Semester 2 (July) commencements
- Year 1, Semester 2
- •
- Year 2, Semester 1 Year 2, Semester 2 •
- Year 3, Semester 1 •
- Year 3, Semester 2 •
- Year 4, Semester 1 Year 4, Semester 2
- ٠
- Year 5, Semester 1 •

| Code | Title | |
|-------------------------------------|---------------------------------|--|
| Semester 1 (February) commencements | | |
| Year 1 Semester 1 | | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 1 Semester 2 | | |
| Science Core Unit Option | | |
| Science Major Unit Option | | |



This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE80&courseID=32944. CRICOS No.00213J

Science Major Unit Option

| Year 2 Semeste | er 1 | | |
|----------------------------------|---|--|--|
| SEB115 | Experimental Science 1 | | |
| SEB116 | Experimental Science 2 | | |
| Year 2 Semeste | er 2 | | |
| ERB101 | Earth Systems | | |
| ERB102 | Evolving Earth | | |
| Year 3 Semeste | er 1 | | |
| ERB201 | Destructive Earth: Natural Hazards | | |
| ERB202 | Marine Geoscience | | |
| Year 3 Semeste | | | |
| ERB203 | Sedimentary Geology and Stratigraphy | | |
| ERB204 | Deforming Earth: Fundamentals of Structural Geology | | |
| Year 4 Semeste | er 1 | | |
| ERB301 | Chemical Earth | | |
| ERB302 | Applied Geophysics | | |
| Year 4 Semeste | er 2 | | |
| ERB303 | Energy Resources and Basin Analysis | | |
| ERB304 | Dynamic Earth: Plate Tectonics | | |
| Semester 2 (Jul | y) commencements | | |
| Year 1, Semest | er 2 | | |
| SEB104 | Grand Challenges in Science | | |
| SEB113 | Quantitative Methods in Science | | |
| Year 2, Semest | Year 2, Semester 1 | | |
| SEB115 | Experimental Science 1 | | |
| SEB116 | Experimental Science 2 | | |
| Year 2, Semest | er 2 | | |
| ERB101 | Earth Systems | | |
| ERB102 | Evolving Earth | | |
| Year 3, Semest | er 1 | | |
| ERB201 | Destructive Earth: Natural Hazards | | |
| ERB202 | Marine Geoscience | | |
| Year 3, Semest | er 2 | | |
| ERB203 | Sedimentary Geology and Stratigraphy | | |
| ERB204 | Deforming Earth: Fundamentals of Structural Geology | | |
| Year 4, Semest | ÷. | | |
| ERB301 | Chemical Earth | | |
| ERB302 | Applied Geophysics | | |
| Year 4, Semest | | | |
| ERB303 | Energy Resources and Basin Analysis | | |
| ERB304 | Dynamic Earth: Plate Tectonics | | |
| Year 5, Semest Science Core U | | | |
| | | | |

| Semesters • Semester 1 (February) commencements • Year 1 Semester 1 • Year 1 Semester 2 • Year 2 Semester 2 • Year 2 Semester 2 • Year 3 Semester 2 • Year 3 Semester 2 • Year 4 Semester 2 • Year 4 Semester 2 • Semester 2 (July) commencements • Year 1, Semester 2 • Year 2, Semester 1 • Year 2, Semester 1 • Year 3, Semester 1 • Year 3, Semester 1 • Year 4, Semester 2 • Year 4, Semester 2 • Year 4, Semester 2 • Year 4, Semester 2 • Year 5, Semester 1 | |
|--|--|
| Code | |
| Semester 1 (Febr Year 1 Semester | uary) commencements |
| | Grand Challenges in |
| SEB104 | Science |
| SEB113 | Quantitative Methods in Science |
| Year 1 Semester | |
| Science Core Un | - |
| Science Major Ur | - |
| Year 2 Semester | |
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 2 Semester | |
| ERB101 | Earth Systems |
| EVB102 | Ecosystems and the Environment |
| Year 3 Semester | |
| BVB202 | Experimental Design and Quantitative Methods |
| EVB203 | Geospatial Information Science |
| Year 3 Semester | 2 |
| BVB204 | Ecology |
| EVB302 | Environmental Pollution |
| Year 4 Semester | |
| BVB311 | Conservation Biology |
| EVB312 | Soils and the Environment |
| Year 4 Semester | |
| ERB310 EVB304 | Groundwater Systems Case Studies in Environmental Science |

| Semester 2 (July) commencements | | |
|---------------------------------|--|--|
| Year 1, Semester | | |
| SEB104 | Grand Challenges in Science | |
| SEB113 | Quantitative Methods in Science | |
| Year 2, Semester | ·1 | |
| SEB115 | Experimental Science | |
| SEB116 | Experimental Science 2 | |
| Year 2, Semester | 2 | |
| ERB101 | Earth Systems | |
| EVB102 | Ecosystems and the Environment | |
| Year 3, Semester | 1 | |
| BVB202 | Experimental Design and Quantitative Methods | |
| EVB203 | Geospatial Information Science | |
| Year 3, Semester | 2 | |
| BVB204 | Ecology | |
| EVB302 | Environmental Pollution | |
| Year 4, Semester | ·1 | |
| BVB311 | Conservation Biology | |
| EVB312 | Soils and the Environment | |
| Year 4, Semester | 2 | |
| ERB310 | Groundwater Systems | |
| EVB304 | Case Studies in Environmental Science | |
| Year 5, Semester 1 | | |
| Science Core Unit Option | | |
| Science Major Unit Option | | |

Semesters

- Semester 1 (February) commencements
- Year 1 Semester 1
- Year 1 Semester 2
 Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Semester 2 (July) commencements

QUI

- Year 1, Semester 2
- Year 2, Semester 1
 Year 2, Semester 2
- Year 3, Semester 1 Year 3, Semester 2
- •
- Year 4, Semester 1 Year 4, Semester 2 •
- Year 5, Semester 1

| Code | Title |
|------------------|--|
| | uary) commencements |
| Year 1 Semester | |
| SEB113 | Quantitative Methods in Science |
| SEB115 | Experimental Science |
| Year 1 Semester | 2 |
| PVB102 | Physics of the Very Small |
| SEB104 | Grand Challenges in Science |
| Year 2 Semester | 1 |
| PVB210 | Stellar Astrophysics |
| SEB116 | Experimental Science 2 |
| Year 2 Semester | 2 |
| PVB220 | Cosmology |
| Science Core Uni | • |
| Year 3 Semester | |
| PQB360 | Global Energy Balance and Climate Change |
| PVB203 | Experimental Physics |
| Year 3 Semester | 2 |
| PVB202 | Mathematical Methods in Physics |
| PVB204 | Electromagnetism |
| Year 4 Semester | 1 |
| PVB301 | Materials and Thermal Physics |
| PVB302 | Classical and Quantum Physics |
| Year 4 Semester | 2 |
| PVB303 | Nuclear and Particle Physics |
| PVB304 | Physics Research |
| | commencements |
| Year 1, Semester | |
| PVB102 | Physics of the Very Small |
| SEB104 | Grand Challenges in Science |
| Year 2, Semester | |
| SEB115 | Experimental Science |
| SEB116 | Experimental Science 2 |
| Year 2, Semester | 2 |
| PVB202 | Mathematical Methods in Physics |
| SEB113 | Quantitative Methods in Science |
| Year 3, Semester | 1 |
| PVB203 | Experimental Physics |
| PVB210 | Stellar Astrophysics |

| Year 3, Semester 2 | | |
|--------------------------|--|--|
| PVB204 | Electromagnetism | |
| PVB220 | Cosmology | |
| Year 4, Semester | 1 | |
| PVB301 | Materials and Thermal Physics | |
| PVB302 | Classical and Quantum Physics | |
| Year 4, Semester | 2 | |
| PVB303 | Nuclear and Particle Physics | |
| PVB304 | Physics Research | |
| Year 5, Semester | 1 | |
| PQB360 | Global Energy Balance and Climate Change | |
| Science Core Unit Option | | |

Semesters

- Semester 1 (February) commencements Year 1 - Semester 1 Year 1 - Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
 Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title | |
|-------------------------------------|--|--|
| Semester 1 (February) commencements | | |
| Year 1 - Semest | er 1 | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | er 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semester 2 | | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit Option | | |
| Year 3 - Semester 1 | | |
| EGB261 | Unit Operations | |
| EGB323 | Fluid Mechanics | |

| Year 3 - Semester 2CVB101General ChemistryEGB322ThermodynamicsYear 4 - Semester 1EGB262Process PrinciplesEGB362Operations Management and Process EconomicsYear 4 - Semester 2EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH400-3Flant and Process DesignEGH402Process Control | | | |
|---|---------------------|-------------------------------------|--|
| EGB322ThermodynamicsYear 4 - Semester 1EGB262Process PrinciplesEGB362Operations Management and Process EconomicsYear 4 - Semester 2EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH400-3Flant and Process DesignEGH422Advanced ThermodynamicsEGH423Fluids Dynamics | | | |
| Year 4 - Semester 1EGB262Process PrinciplesEGB362Operations Management and Process EconomicsYear 4 - Semester 2EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH400-3Fleat and Process DesignEGH422Advanced ThermodynamicsEGH423Fluids Dynamics | CVB101 | General Chemistry | |
| EGB262Process PrinciplesEGB362Operations Management and Process EconomicsYear 4 - Semester 2EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH400-3Fleat and Process DesignEGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGB322 | Thermodynamics | |
| EGB362Operations Management and Process EconomicsYear 4 - Semester 2EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH400-3Fleat and Process DesignEGH422Advanced ThermodynamicsEGH423Fluids Dynamics | Year 4 - Semest | ter 1 | |
| EGB362Management and Process EconomicsYear 4 - Semester 2EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH400-3Research Project 2EGH400-4Research Project 2EGH400-5Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGB262 | Process Principles | |
| EGB364Process ModellingEGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | | Management and Process Economics | |
| EGH411Industrial ChemistryYear 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced | Year 4 - Semest | ter 2 | |
| Year 5 - Semester 1EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGB364 | Process Modelling | |
| EGB361Minerals and Minerals ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGH411 | Industrial Chemistry | |
| EGB361ProcessingEGH400-1Research Project 1EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | Year 5 - Semest | ter 1 | |
| EGH404Research in Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGB361 | | |
| EGH404Engineering PracticeEGH463Plant and Process DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGH400-1 | Research Project 1 | |
| EGH463DesignYear 5 - Semester 2EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGH404 | | |
| EGH400-2Research Project 2EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | EGH463 | | |
| EGH422Advanced ThermodynamicsEGH423Fluids Dynamics | Year 5 - Semester 2 | | |
| EGH422ThermodynamicsEGH423Fluids Dynamics | EGH400-2 | Research Project 2 | |
| | EGH422 | | |
| EGH462 Process Control | EGH423 | Fluids Dynamics | |
| | EGH462 | Process Control | |

Semesters

| Semester 1 (February |) |
|--|---|
|--|---|

- commencements
- Year 1 Semester 1 •
- Year 1 Semester 2 Year 2 - Semester 1
- Year 2 Semester 2
- Year 3 Semester 1 ٠
- Year 3 Semester 2
- ٠
- Year 4, Semester 1 •
- Year 4 Semester 2 Year 5 Semester 1 ٠
- Year 5 Semester 2

| Code | Title | |
|---------------------|--|--|
| Semester 1 (Feb | oruary) commencements | |
| Year 1 - Semest | er 1 | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semester 1 | | |
| EGB111 | Foundation of Engineering Design | |

QUI

| EGB121 | Engineering Mechanics | |
|---------------------|---|--|
| Year 2 - Semest | ter 2 | |
| EGB123 | Civil Engineering Systems | |
| Foundation Unit | Option | |
| Year 3 - Semest | ter 1 | |
| EGB270 | Civil Engineering Materials | |
| EGB272 | Traffic and Transport Engineering | |
| Year 3 - Semest | ter 2 | |
| EGB273 | Principles of Construction | |
| EGB373 | Geotechnical Engineering | |
| Year 4, Semeste | er 1 | |
| EGB275 | Structural Mechanics | |
| EGB371 | Engineering Hydraulics | |
| Year 4 - Semest | ter 2 | |
| EGB376 | Steel Design | |
| EGH471 | Advanced Water Engineering | |
| Year 5 - Semest | ter 1 | |
| EGB375 | Design of Concrete Structures | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH473 | Advanced Geotechnical Engineering | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH472 | Advanced Highway and Pavement Engineering | |
| EGH475 | Advanced Concrete Structures | |
| EGH479 | Advances in Civil Engineering Practice | |

Semesters

- Semester 1 (February) commencements
- Year 1 Semester 1
 Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
 Year 5 Semester 2

| Code | Title | |
|---------------------|----------------------------------|--|
| Semester 1 (Feb | oruary) commencements | |
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering | |

| | Mathematics | |
|--|--|--|
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | er 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit | Option | |
| Year 3 - Semest | er 1 | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB242 | Signal Analysis | |
| Year 3 - Semest | er 2 | |
| CAB201 | Programming Principles | |
| Intermediate Ele | ctrical Option Unit | |
| Year 4 - Semest | er 1 | |
| EGB240 | Electronic Design | |
| | ftware Option Unit | |
| Year 4 - Semest | er 2 | |
| CAB403 | Systems Programming | |
| Intermediate Electrical or Software Option Unit | | |
| Year 5 - Semest | er 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH400-1 | Research Project 1 | |
| Advanced Electr Unit | ical or Software Option | |
| EGH456 | Embedded Systems | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH455 | Advanced Systems Design | |
| Advanced Electrical Option Unit | | |
| Advanced Software Option Unit | | |

Semesters

- Semester 1 (February) commencements
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
 Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
 Year 4 Semester 2
- Year 5 Semester 1

| Year 5 - Semester 2 | | |
|---|--|--|
| Code | Title | |
| Semester 1 (F | ebruary) commencements | |
| Year 1 - Seme | ester 1 | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Seme | ester 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Seme | | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Seme | | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB120 | Foundations of Electrical Engineering | |
| Year 3 - Seme | ester 1 | |
| EGB240 | Electronic Design | |
| | Electromagnetics and | |
| EGB241 | Machines | |
| EGB241 Year 3 - Seme | Machines | |
| | Machines | |
| Year 3 - Seme EGB242 | Machines ester 2 | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at e. | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at e. | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at e. ester 1 Design and Practice | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at ester 1 Design and Practice nit Option | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at ester 1 Design and Practice nit Option | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at a. ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I Year 5 - Seme | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at e. ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I Seme EGH400-1 EGH404 | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice | |
| Year 3 - Semo EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Semo EGB340 Foundation U Year 4 - Semo Intermediate I Intermediate I Year 5 - Semo EGH400-1 EGH404 Advanced Ele | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice estrical Option Unit (1) | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can I requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I SeGH400-1 EGH404 Advanced Ele | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice ectrical Option Unit (1) ectrical Option Unit (2) | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I Year 5 - Seme EGH400-1 EGH404 Advanced Ele Year 5 - Seme | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at a. ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice extrical Option Unit (1) estrical Option Unit (2) ester 2 | |
| Year 3 - Semo EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Semo EGB340 Foundation U Year 4 - Semo Intermediate I Year 5 - Semo EGH400-1 EGH404 Advanced Ele Year 5 - Semo EGH400-2 | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice ectrical Option Unit (1) ectrical Option Unit (2) ester 2 Research Project 2 | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I Intermediate I EGH400-1 EGH400-1 EGH404 Advanced Ele Year 5 - Seme EGH400-2 Advanced Ele | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice extrical Option Unit (1) extrical Option Unit (2) ester 2 Research Project 2 Research Project 2 extrical Option Unit (3) | |
| Year 3 - Seme EGB242 Intermediate I EGB348 can requisite waiv granted if you the same time Year 4 - Seme EGB340 Foundation U Year 4 - Seme Intermediate I Intermediate I Intermediate I Seme EGH400-1 EGH404 Advanced Ele Year 5 - Seme EGH400-2 Advanced Ele Advanced Ele | Machines ester 2 Signal Analysis Electrical Option Unit (1) be selected from the list. A er for this unit will be are enrolled in EGB242 at are enrolled in EGB242 at ester 1 Design and Practice nit Option ester 2 Electrical Option Unit (2) Electrical Option Unit (3) ester 1 Research Project 1 Research in Engineering Practice ectrical Option Unit (1) ectrical Option Unit (2) ester 2 Research Project 2 | |

Semesters

• Semester 1 (February) commencements



| • | Year 1 | - Semester 1 |
|---|--------|--------------|
| | | |

- Year 1 Semester 2
- Year 2 Semester 1 . Year 2 - Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1 .
- Year 4 Semester 2 Year 5 Semester 1
- Year 5 Semester 2

Code Title Semester 1 (February) commencements Year 1 - Semester 1 Energy in Engineering **EGB113** Systems Introductory **MZB125** Engineering Mathematics Computational **MXB161** Explorations Year 1 - Semester 2 Engineering **EGB100** Sustainability and **Professional Practice** Engineering **MZB126** Computation Year 2 - Semester 1 Foundation of **EGB111 Engineering Design** EGB121 **Engineering Mechanics** Year 2 - Semester 2 Foundations of **EGB120 Electrical Engineering** Foundation Unit Option Year 3 - Semester 1 Microprocessors and CAB202 **Digital Systems EGB240 Electronic Design** Year 3 - Semester 2 **EGB242** Signal Analysis Intermediate Electrical Option Unit Year 4 - Semester 1 Aircraft Systems and **EGB243** Flight Systems Engineering EGB349 and Design Project Year 4 - Semester 2 Control and Dynamic **EGB345** Systems **Unmanned Aircraft EGB346** Systems Year 5 - Semester 1 EGH400-1 **Research Project 1** Research in EGH404 **Engineering Practice EGH446** Autonomous Systems

| EGH400-2 | Research Project 2 |
|-----------------|---------------------------------------|
| EGH445 | Modern Control |
| EGH450 | Advanced Unmanned Aircraft Systems |
| Advanced Electr | ical Option Unit |

Semesters

| ٠ | Semester 1 | (February) |
|---|------------|---------------|
| | commencen | nents |
| | V | a s s t s u A |

- <u>Year 1 Semester 1</u> Year 1 - Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2 Year 5 - Semester 1
- Year 5 Semester 2

| • <u>Tear 5 - 56</u> | |
|----------------------|--|
| Code | Title |
| Semester 1 (Fel | oruary) commencements |
| Year 1 - Semest | ter 1 |
| EGB113 | Energy in Engineering Systems |
| MZB125 | Introductory Engineering Mathematics |
| OR | |
| MXB161 | Computational Explorations |
| Year 1 - Semest | ter 2 |
| EGB100 | Engineering Sustainability and Professional Practice |
| MZB126 | Engineering Computation |
| Year 2 - Semest | ter 1 |
| EGB111 | Foundation of Engineering Design |
| EGB121 | Engineering Mechanics |
| Year 2 - Semest | ter 2 |
| EGB120 | Foundations of Electrical Engineering |
| Foundation Unit | Option |
| Year 3 - Semest | ter 1 |
| EGB210 | Fundamentals of Mechanical Design |
| EGB214 | Materials and Manufacturing |
| Year 3 - Semest | ter 2 |
| EGB211 | Dynamics |
| EGB314 | Strength of Materials |
| Year 4 - Semest | ter 1 |
| EGB321 | Dynamics of Machines |
| EGB323 | Fluid Mechanics |
| Year 4 - Semest | ter 2 |
| EGB322 | Thermodynamics |
| EGH404 | Research in Engineering Practice |

| Year 5 - Semester 1 | |
|---------------------|-------------------------------|
| EGB316 | Design of Machine Elements |
| EGH400-1 | Research Project 1 |
| EGH414 | Stress Analysis |
| EGH421 | Vibration and Control |
| Year 5 - Semester 2 | |
| EGH400-2 | Research Project 2 |
| EGH420 | Mechanical Systems Design |
| EGH422 | Advanced Thermodynamics |
| EGH423 | Fluids Dynamics |

Semesters

- Semester 1 (February) commencements
- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
- Year 5 Semester 1
- Year 5 Semester 2

| Code | Title | |
|-----------------|--|--|
| Semester 1 (Fet | oruary) commencements | |
| Year 1 - Semest | er 1 | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | er 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semest | er 2 | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit | • | |
| Year 3 - Semest | er 1 | |
| EGB211 | Dynamics | |
| EGB242 | Signal Analysis | |
| Year 3 - Semest | er 2 | |
| CAB202 | Microprocessors and Digital Systems | |
| EGB345 | Control and Dynamic | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

Advanced Electrical Option Unit

Year 5 - Semester 2

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=SE80&courseID=32944. CRICOS No.00213J



| | Systems | |
|---------------------------------|-------------------------------------|--|
| Year 4 - Semest | er 1 | |
| EGB220 | Mechatronics Design 1 | |
| EGB321 | Dynamics of Machines | |
| Year 4 - Semester 2 | | |
| EGB320 | Mechatronics Design 2 | |
| Intermediate Ele | ectrical Option Unit | |
| Year 5 - Semester 1 | | |
| EGH400-1 | Research Project 1 | |
| EGH404 | Research in Engineering Practice | |
| EGH419 | Mechatronics Design 3 | |
| EGH446 | Autonomous Systems | |
| Year 5 - Semester 2 | | |
| EGH400-2 | Research Project 2 | |
| EGH413 | Advanced Dynamics | |
| EGH445 | Modern Control | |
| Advanced Electrical Option Unit | | |

Semesters

- Semester 1 (February)
- commencements
- Year 1 Semester 1
- Year 1 Semester 2
 Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- ٠
- Year 3 Semester 2 Year 4 Semester 1 .
- Year 4 Semester 2 ٠
- Year 5 Semester 1
- Year 5 Semester 2

Code Title

| Coue | THUE | |
|------------------------|--|--|
| Semester 1 (Fet | oruary) commencements | |
| Year 1 - Semester 1 | | |
| EGB113 | Energy in Engineering Systems | |
| MZB125 | Introductory Engineering Mathematics | |
| OR | | |
| MXB161 | Computational Explorations | |
| Year 1 - Semest | er 2 | |
| EGB100 | Engineering Sustainability and Professional Practice | |
| MZB126 | Engineering Computation | |
| Year 2 - Semest | er 1 | |
| EGB111 | Foundation of Engineering Design | |
| EGB121 | Engineering Mechanics | |
| Year 2 - Semester 2 | | |
| EGB120 | Foundations of Electrical Engineering | |
| Foundation Unit Option | | |
| Year 3 - Semester 1 | | |

| 1000 | | |
|-------------|---|-------------------|
| | | |
| | | |
| | | |
| This inforr | mation is correct as at 10/12/2018. For the | e most up-to-date |
| https://w | /ww.student.aut.edu.au/enrolment/courses | s/course?courseC |

| EGB210 | Fundamentals of Mechanical Design |
|-----------------|--|
| LSB131 | Anatomy |
| Year 3 - Semest | er 2 |
| EGB211 | Dynamics |
| LSB231 | Physiology |
| Year 4 - Semest | er 1 |
| EGB214 | Materials and Manufacturing |
| EGB323 | Fluid Mechanics |
| Year 4 - Semest | er 2 |
| EGB314 | Strength of Materials |
| EGH404 | Research in |
| | Engineering Practice |
| Year 5 - Semest | |
| EGB319 | BioDesign |
| EGH400-1 | Research Project 1 |
| EGH414 | Stress Analysis |
| EGH418 | Biomechanics |
| Year 5 - Semest | er 2 |
| EGH400-2 | Research Project 2 |
| EGH424 | Biofluids |
| EGH435 | Modelling and Simulation for Medical Engineers |
| EGH438 | Biomaterials |



QUT

Bachelor of Science (Honours)

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | ST10 |
| CRICOS | 080487J |
| Duration (full-time) | 1 year |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$35,700 per year full-time (96 credit points) |
| Total credit points | 96 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Konstantin Momot; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Melody de Laat (Biological Sciences), Dr James Blinco (Chemistry), Dr Christoph Schrank (Earth Sciences), Professor Stuart Parsons (Environmental Science), Dr Konstantin Momot (Physics) |

Domestic Entry requirements Academic entry requirements

A completed recognised bachelor degree in science or equivalent with a minimum grade point average (GPA) score of 4.5 (on a 7-point scale), completed within the last five years.

International Entry requirements

Academic entry requirements

A completed recognised bachelor degree in science or equivalent with a minimum grade point average (GPA) score of 4.5 (on a 7-point scale), completed within the last five years.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International Testing System) | English Language |
|---|------------------|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Overview

The Bachelor of Science (Honours) allows you to further develop specific areas of expertise in science by providing extended modern and rigorous training in science. It prepares you both for higherlevel graduate careers in industry and government and for research at PhD or Research Masters level.

Through a combination of research and advanced coursework units, you will pursue specialised studies in an area of mutual interest with a personal research mentor/supervisor. You will develop high level skills in a specific discipline area (Biological Science, Earth Science, Environmental Science, Chemistry or Physics) and acquire research skills appropriate to your discipline. Coursework units provide you the opportunity to develop much more advanced skills and knowledge compared with those built in the undergraduate course. You will design and undertake experimental programs in either laboratory or field settings to solve complex problems. A research project allows you to demonstrate your advanced academic capability and culminates in the completion of an honours thesis.

Course Design

Requirements for the completion of ST10 Bachelor of Science(Honours) (Study Area A) are as follows:

STUDY AREA A: 96 credit points (6 units) comprising One (1) Major from the following:

- Biological Sciences
- Chemistry
- Earth Science
- Environmental Science
- Physics

Each Major is comprised of the Core units Foundations of Research and Reviewing the Field, and the choice of either the *Expanded Research* Strand or the *Extended Coursework* Strand.

Each strand comprises of coursework and a major research project supervised by QUT staff.

Career Outcomes

Research, Graduate employment in industry or government.

Professional Recognition

Membership in professional organisations is not specifically tied to the completion of an Honours degree as entry requirements are met by the completion of the Bachelors degree.

Pathways to Further Study

The QUT Bachelor of Science (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Honours provides the key research pathway to postgraduate study. The program is designed to easily articulate into a Master of Science (Research) with one year advanced standing or into a PhD (depending upon the level of Honours attained).

Domestic Course structure

You must complete 96 credit points (8 units) from one of the following study areas:

- Biological Sciences
- Chemistry
- Earth Science
- Environmental Science
- Physics

International Course structure

You must complete 96 credit points (8 units) from one of the following study areas:

Biological Sciences

Bachelor of Science (Honours)

- Chemistry
- Earth Science
- Environmental Science
- Physics

Sample Structure

| Code | Title |
|---|--|
| Semester 1 | |
| SEB400 | Foundations of Research |
| SEB402 | Project Proposal |
| SEB410 | Advanced Topic 1 |
| SEB403-1 | Honours Research Project-1 |
| Semester 2 | |
| SEB403-2 | Honours Research Project-2 |
| SEB403-3 | Honours Research Project-3 |
| SEB403-4 | Honours Research Project-4 |
| SEB411 | Advanced Topic 2 |
| Code | Title |
| Semester 1 | |
| | |
| SEB400 | Foundations of Research |
| SEB400 SEB402 | |
| | Research |
| SEB402 | Research Project Proposal Advanced Topic |
| SEB402 SEB410 | Research Project Proposal Advanced Topic 1 Honours Research |
| SEB402 SEB410 SEB403-1 | Research Project Proposal Advanced Topic 1 Honours Research |
| SEB402 SEB410 SEB403-1 Semester 2 | Research Project Proposal Advanced Topic 1 Honours Research Project-1 Honours Research |
| SEB402 SEB410 SEB403-1 Semester 2 SEB403-2 | Research Project Proposal Advanced Topic 1 Honours Research Project-1 Honours Research Project-2 Honours Research |
| SEB402 SEB410 SEB403-1 Semester 2 SEB403-2 SEB403-3 | Research Project Proposal Advanced Topic 1 Honours Research Project-1 Honours Research Project-2 Honours Research Project-3 Honours Research |
| SEB402 SEB410 SEB403-1 SEB403-2 SEB403-2 SEB403-3 SEB403-4 SEB411 | Research Project Proposal Advanced Topic 1 Honours Research Project-1 Honours Research Project-2 Honours Research Project-3 Honours Research Project-4 Advanced Topic 2 |
| SEB402 SEB410 SEB403-1 Semester 2 SEB403-2 SEB403-3 SEB403-4 | Research Project Proposal Advanced Topic 1 Honours Research Project-1 Honours Research Project-2 Honours Research Project-3 Honours Research Project-4 Advanced Topic |

Research
Project-1Semester 2SEB411Advanced Topic
2SEB403-2Honours
Research
Project-2SEB403-3Honours
Research
Project-3

Honours

| SEB403-4 | Research Project-4 |
|------------|----------------------------------|
| Code | Title |
| Semester 1 | |
| SEB400 | Foundations of Research |
| SEB402 | Project Proposal |
| SEB410 | Advanced Topic 1 |
| SEB403-1 | Honours Research Project-1 |
| Semester 2 | |
| SEB403-2 | Honours Research Project-2 |
| SEB403-3 | Honours Research Project-3 |
| SEB403-4 | Honours Research Project-4 |
| SEB411 | Advanced Topic 2 |

| Code | Title |
|------------|----------------------------------|
| Semester 1 | |
| SEB400 | Foundations of Research |
| SEB402 | Project Proposal |
| SEB410 | Advanced Topic 1 |
| SEB403-1 | Honours Research Project-1 |
| Semester 2 | |
| SEB411 | Advanced Topic 2 |
| SEB403-2 | Honours Research Project-2 |
| SEB403-3 | Honours Research Project-3 |
| SEB403-4 | Honours Research Project-4 |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

Honours

1

Project Proposal Advanced Topic

SEB402

SEB410

SEB403-1

. https://www.student.qut.edu.au/enrolment/courses/course?courseCode=ST10&courseID=32953. CRICOS No.00213J



QUT

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | UD01 |
| CRICOS | 080479J |
| Duration (full-time) | 4 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,900 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,400 per year full-time (96 credit points) |
| Total credit points | 384 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | SEF Enquiry - Email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

This program has been designed to provide you with a real life exposure to a range of urban development disciplines to understand how your chosen course helps to prepare you for a rewarding career in the built environment. You have the opportunity to collaborate with your peers and teaching staff at QUT and to learn in exciting new learning environments. Throughout the course you will experience a range of site visits and fieldwork that will link the theory in lectures to everyday situations in your chosen field of study. You will learn about a range of career opportunities and professional outcomes that will enable you to optimise your experience and potential career. Your major will provide you with in depth knowledge and expertise in an urban development discipline. You will also have the opportunity to undertake a second major or two minors in an area that will broaden your urban development experience and/or complement your first major.

Course Design

Your QUT Bachelor of Urban Develoment (Honours) degree consists of 384 credit points (32 units) arranged as follows:

(a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

(b) 216 credit points (18 units) comprising one (1) major from the following:

- Construction Management
- •
- Quantity Surveying and Cost Engineering
- •
- Urban and Regional Planning

(c)

96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each) from the options specified for your chosen major.

Pathways to Further Study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs

Domestic Course structure Course Design

Your QUT Bachelor of Urban Develoment (Honours) degree consists of 384 credit points (32 units) arranged as follows:

(a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

(b) 216 credit points (18 units) comprising one (1) major from the following:

- Construction Management
- Quantity Surveying and Cost
- Engineering
- Urban and Regional Planning

(c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each) from the options specified for your chosen major.

International Course structure

Course Design

Your QUT Bachelor of Urban Develoment (Honours) degree consists of 384 credit points (32 units) arranged as follows:

(a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

(b) 216 credit points (18 units) comprising one (1) major from the following:

- Construction Management
- Quantity Surveying and Cost Engineering
- Urban and Regional Planning



(c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each) from the options specified for your chosen major.



QUT

Handbook

| Veet | 2019 |
|-----------------------------------|--|
| Year | 2018 |
| QUT code | UD01 |
| CRICOS | 080479J |
| Duration (full-time) | 4 years |
| OP | 12 |
| Rank | 73 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,900 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,400 per year full-time (96 credit points) |
| Total credit points | 384 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry - Email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Carol Hon |
| | sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
 - Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

The QUT Bachelor of Urban Development (Honours) degree with a primary major (Study Area A) in Construction Management is designed to provide you with 'real-life' exposure, and the knowledge and skills to prepare you for rewarding career the Construction, Development and associated industries. With the capacity, will and innovation to contribute to a better built environment, as a work-ready graduate, you will be able to apply sound judgement and expertise in practice managing complex built environments.

Course Design

Your QUT Bachelor of Urban Development (Honours) (Construction Management) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace

learning.

b) 216 credit points (18 units) of Construction Management discipline units

c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Urban Development Core Units

These units will engage you in understanding Urban Development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Construction Management Major Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher order thinking to an advanced level.

Complementary Studies Options

Second Major:

A choice of one second major from:

Urban Development disciplines:

•Urban and Regional Planning Studies •Property

Accountancy

•Applied Economics and Finance

(additional second major choices are currently under development)

Minors:

A choice of two minors from the lists below:

Urban Development disciplines:

•Urban and Regional Planning Studies •Property Development •Property Investment and Finance

•Property Valuation

Other disciplines:

•Language Minors – University Wide Options •<u>University Wide Minors</u>



Special Course Requirements

You are required to obtain a minimum of 80 days of approved construction management industrial experience as part of your Work Integrated Learning core unit.

Professional Recognition

Graduates are eligible for membership of the Australian Institute of Building (AIB)

Pathways to Further Study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs

Domestic Course structure

Your QUT Bachelor of Urban Development (Honours) (Construction Management) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of urban development core units, which includes a work integrated learning unit that requires completion of workplace learning

b) 216 credit points (18 units) of construction management discipline units

c) 96 credit points of complementary studies comprising of either a second major (8 unit set) or two minors (4 unit set each).

Urban development core units

These units will engage you in understanding urban development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Construction management major discipline units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher-order thinking to an advanced level.

Complementary studies options

Complementary studies may be taken as a second major of 96 credit points or two minors of 48 credit points each. Experiential minors in work integrated learning as well as student exchange are also available.

Second majors

A second major provides the opportunity for you to undertake significant studies in a second urban development discipline such as Property Economics, Urban and Regional Planning, Architectural Studies, Accountancy or Applied Economics and Finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowlege and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary non-discipline skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Pathways to further study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant masters and/or doctoral level programs.

International Course structure

Your QUT Bachelor of Urban Development (Honours) (Construction Management) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of urban development core units, which includes a work integrated learning unit that requires completion of workplace learning

b) 216 credit points (18 units) of construction management discipline units

c) 96 credit points of complementary studies comprising of either a second major (8 unit set) or two minors (4 unit set each).

Urban development core units

These units will engage you in understanding urban development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Construction management major discipline units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher order thinking to an advanced level.

Complementary studies options

Complementary studies may be taken as a second major of 96 credit points or two minors of 48 credit points each. Experiential minors in work integrated learning as well as student exchange are also available.

Second majors

A second major provides the opportunity for you to undertake significant studies in a second urban development discipline such as Property Economics, Urban and Regional Planning, Architectural Studies, Accountancy or Applied Economics and Finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowlege and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary non-discipline skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Pathways to further study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be





Bachelor of Urban Development (Honours) (Construction Management)

eligible for discipline relevant masters and/or doctoral level programs.

Sample Structure Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
 Year 3, Semester 1
- Year 3, Semester 2
 Year 4, Semester 1
 Year 4, Semester 2

| Code | Title |
|------------------------------------|--|
| Year 1, Semester | 1 |
| USB100 | Understanding the Built Environment |
| UXB110 | Residential Construction |
| UXB111 | Imagine Construction Management |
| UXB112 | Introduction to Structures |
| Year 1, Semester | 2 |
| BSB113 | Economics |
| LWS012 | Urban Development Law |
| UXB113 | Measurement for Construction |
| UXB114 | Integrated Construction |
| Year 2, Semester | 1 |
| UXB210 | Commercial Construction |
| UXB211 | Building Services |
| UXB213 | Advanced Measurement for Construction |
| 2nd Major/Minor u | init |
| Year 2, Semester | 2 |
| UXB212 | Designing Structures |
| UXB214 | Construction Estimating |
| 2nd Major/Minor u | init |
| 2nd Major/Minor unit | |
| Year 3, Semester 1 | |
| USB300 | Property Development |
| UXH310 | High-rise Construction |
| UXH311 | Contract Administration |
| 2nd Major/Minor unit | |
| Year 3, Semester | 2 |
| UXB301 | Work Integrated Learning Built Environment |
| SEB701 Work Integrated Learning is | |

| replaced by UXB301 from S2, 2017 | |
|----------------------------------|---|
| UXH312 | Construction Legislation |
| UXH314 | Modern Construction Business |
| 2nd Major/Minor u | ınit |
| Year 4, Semester 1 | |
| UXH300 | Research Methods Built Environment |
| UXH400-1 | Research Project 1 - Part A |
| UXH411 | Programming and Scheduling |
| 2nd Major/Minor unit | |
| Year 4, Semester 2 | |
| UXH400-2 | Research Project 1 - Part B |
| UXH410 | Strategic Construction Management |
| 2nd Major/Minor unit | |

2nd Major/Minor unit



QUT

Handbook

| Year | 2018 |
|-----------------------------------|--|
| | |
| QUT code | UD01 |
| CRICOS | 080479J |
| Duration (full-time) | 4 years |
| OP | 12 |
| Rank | 73 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,900 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,400 per year full-time (96 credit points) |
| Total credit points | 384 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry - Email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Mr Jason Gray sef.enquiry@qut.edu.au |
| | cononquiry equiloculau |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

- English
 - · Maths A, B or C

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

International Subject prerequisites

Maths A, B or C

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Course Overview

The QUT Bachelor of Urban Development (Honours) degree with a primary major (Study Area A) in Quantity Surveying and Cost Engineering is designed to provide you with 'real-life' exposure, and the knowledge and skills to prepare you for rewarding career the Construction, Resources and associated industries. With the capacity, will and innovation to contribute to a better built environment, as a work-ready graduate, you will be able to apply sound judgement and expertise in practice within your chosen field.

Course Design

Your QUT Bachelor of Urban Development (Honours) (Quantity Surveying and Cost Engineering) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

b) 216 credit points (18 units) of Quantity Surveying and Cost Engineering discipline units

c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Urban Development Core Units

These units will engage you in understanding Urban Development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Quantity Surveying and Cost Engineering Major Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher order thinking to an advanced level.

Complementary Studies Options

Second Major:

A choice of one second major from:

Urban Development disciplines:

- •Urban and Regional Planning Studies •Property
- Accountancy
- •Applied Economics and Finance

(additional second major choices are currently under development)

Minors:

A choice of two minors from the lists below:

Urban Development disciplines:

- •Urban and Regional Planning Studies •Property Development
- •Property Investment and Finance •Property Valuation

Other disciplines:

•Language Minors – University Wide Options



Bachelor of Urban Development (Honours) (Quantity Surveying and Cost Engineering)

•University Wide Minors

Special Course Requirements

You are required to obtain a minimum of 80 days of approved quantity surveying and cost engineering industrial experience as part of your Work Integrated Learning core unit.

Professional Recognition

Graduates are eligible for membership of the Australian Institute of Quantity Surveyors (AIQS), the Royal Institution of Chartered Surveyors (RICS) and Board of Quantity Surveyors Malaysia (BQSM).

Pathways to Further Study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs

Domestic Course structure

Your QUT Bachelor of Urban Development (Honours) (Quantity Surveying and Cost Engineering) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of urban development core units, which includes a work integrated learning unit that requires completion of workplace learning

b) 216 credit points (18 units) of quantity surveying and cost engineering discipline units

c) 96 credit points of complementary studies comprising of either a second major (8 unit set) or two minors (4 unit set each).

Urban development core units

These units will engage you in understanding urban development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Quantity surveying and cost engineering major discipline units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher-order thinking to an advanced level.

Complementary studies options

Complementary studies may be taken as a second major of 96 credit points or two minors of 48 credit points each. Experiential minors in work integrated learning as well as student exchange are also available.

Second majors

A second major provides the opportunity for you to undertake significant studies in a second Urban Development discipline such as Property Economics, Urban and Regional Planning, Architectural Studies, Accountancy or Applied Economics and Finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowlege and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary non-discipline skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Pathways to further study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant masters and/or doctoral level programs.

International Course structure

Your QUT Bachelor of Urban Development (Honours) (Quantity Surveying and Cost Engineering) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

b) 216 credit points (18 units) of Quantity Surveying and Cost Engineering discipline units c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Urban Development Core Units

These units will engage you in understanding Urban Development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Quantity Surveying and Cost Engineering Major Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher-order thinking to an advanced level.

Complementary Studies Options

Complementary studies may be taken as a Second Major of 96 credit points or two Minors of 48 credit points each. Experiential minors in Work Integrated Learning as well as student exchange are also available.

Second Majors

A second major provides the opportunity for you to undertake significant studies in a second Urban Development discipline such as Property Economics, Urban and Regional Planning, Architectural Studies, Accountancy or Applied Economics and Finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowlege and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary 'non-discipline' skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Bachelor of Urban Development (Honours) (Quantity Surveying and Cost Engineering)

Pathways to Further Study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs.

Sample Structure

Semesters

- Year 1, Semester 1
- Year 1, Semester 2 •
- Year 2, Semester 1 Year 2, Semester 2 ٠
- Year 3, Semester 1 ٠
- Year 3, Semester 2
- Year 4, Semester 1
 Year 4, Semester 2

| Code | Title | |
|----------------------|---|--|
| Year 1, Semeste | er 1 | |
| USB100 | Understanding the Built Environment | |
| UXB110 | Residential Construction | |
| UXB120 | Introduction to Heavy Engineering Sector Technology | |
| UXB121 | Imagine Quantity Surveying and Cost Engineering | |
| Year 1, Semeste | er 2 | |
| BSB113 | Economics | |
| LWS012 | Urban Development Law | |
| UXB113 | Measurement for Construction | |
| UXB114 | Integrated Construction | |
| Year 2, Semeste | er 1 | |
| UXB210 | Commercial Construction | |
| UXB211 | Building Services | |
| UXB213 | Advanced Measurement for Construction | |
| 2nd Major/Minor | r unit | |
| Year 2, Semeste | er 2 | |
| UXB214 | Construction Estimating | |
| UXB220 | Services and Heavy Engineering Measurement | |
| 2nd Major/Minor | r unit | |
| 2nd Major/Minor | r unit | |
| Year 3, Semester 1 | | |
| USB300 | Property Development | |
| UXH310 | High-rise Construction | |
| UXH311 | Contract Administration | |
| 2nd Major/Minor unit | | |
| Year 3, Semeste | Year 3, Semester 2 | |

| UXB301 | Work Integrated Learning Built Environment | |
|---|--|--|
| SEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017 | | |
| UXH314 | Modern Construction Business | |
| UXH321 | Cost Planning and Controls | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 1 | | |
| UXH300 | Research Methods Built Environment | |
| UXH400-1 | Research Project 1 - Part A | |
| UXH420 | Risk Management in the Resources Sector | |
| 2nd Major/Minor unit | | |
| Year 4, Semester 2 | | |
| UXH312 | Construction Legislation | |
| UXH400-2 | Research Project 1 - Part B | |
| 2nd Major/Minor unit | | |
| 2nd Major/Minor unit | | |
| | | |

QUT

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | UD01 |
| CRICOS | 080479J |
| Duration (full-time) | 4 years |
| OP | 12 |
| Rank | 73 |
| OP Guarantee | Yes |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,900 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,400 per year full-time (96 credit points) |
| Total credit points | 384 |
| Start months | July, February |
| Int. Start Months | July, February |
| Deferment | You can defer your offer and postpone the start of your course for one year. |
| Course Coordinator | SEF Enquiry - Email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | Dr Severine Mayere |
| Coordinator | sef.enquiry@qut.edu.au |

Domestic Assumed knowledge

Before you start this course we assume you have sound knowledge in these areas

English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking 6.0 | |

Course Overview

The QUT Bachelor of Urban Development (Honours) degree with a primary major (Study Area A) in Urban and Regional Planning is designed to provide you with 'real-life' exposure and knowledge and expertise in the field to design and administer plans and policy at neighbourhood, local, regional and state levels. With the capacity and will to contribute to a better built environment, as a work-ready graduate, you will be able to apply your perceptive sensibilities and skills in practice to create sustainable natural and human environments.

Course Design

Your QUT Bachelor of Urban Development (Honours) (Urban and Regional Planning) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

b) 216 credit points (18 units) of Urban and Regional Planning discipline units

c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Urban Development Core Units

These units will engage you in understanding Urban Development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Urban and Regional Planning Major Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher order thinking to an advanced level.

Complementary Studies Options

Second Major:

A choice of one second major from:

Urban Development disciplines:

•Urban Development Construction •Property

Accountancy

•Applied Economics and Finance

(additional second major choices are currently under development)

Minors:

A choice of two minors from the lists below:

Urban Development disciplines:

- Residential Construction
- Administration in Construction
- Building Economics
- Property Development
- •Property Investment and Finance
- Property Valuation

Other disciplines:

Urban Design
 Language Minors – University Wide Options
 <u>University Wide Minors</u>

Professional Recognition

Graduates are eligible for membership of the Planning Institute of Australia (PIA)



Bachelor of Urban Development (Honours) (Urban and Regional Planning)

Pathways to Further Study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs

Domestic Course structure

Your QUT Bachelor of Urban Development (Honours) (Urban and Regional Planning) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of urban development core units, which includes a work integrated learning unit that requires completion of workplace learning

b) 216 credit points (18 units) of urban and regional planning discipline units

c) 96 credit points of complementary studies comprising of either a second major (8 unit set) or two minors (4 unit set each).

Urban development core units

These units will engage you in understanding urban development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Urban and regional planning major discipline units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher-order thinking to an advanced level.

Complementary studies options

Complementary studies may be taken as a second major of 96 credit points or two minors of 48 credit points each. Experiential minors in work integrated learning as well as student exchange are also available.

Second majors

A second major provides the opportunity for you to undertake significant studies in a second Urban Development discipline such as Property Economics, Construction Management, Architectural Studies, Accountancy, Applied Economics and Finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowlege and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary non-discipline' skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Pathways to further study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant masters and/or doctoral level programs.

International Course structure

Your QUT Bachelor of Urban Development (Honours) (Urban and Regional Planning) degree consists of 384 credit points (32 units) arranged as follows:

a) 72 credit points (6 units) of Urban Development Core units, which includes a Work Integrated Learning unit that requires completion of workplace learning.

b) 216 credit points (18 units) of Urban and Regional Planning discipline units

c) 96 credit points of complementary studies comprising of either a Second Major (8 unit set) or two Minors (4 unit set each).

Urban Development Core Units

These units will engage you in understanding Urban Development from a range of disciplinary and multidisciplinary perspectives, expose you to the various outcomes available for pursuing studies in this field and introduce the fundamental basis for policy and practice. Later core units, together with the discipline specific units, will progress your learning development through experiential and enquiry based learning in collaborative environments.

Urban and Regional Planning Major Discipline Units

These units give you discipline level knowledge, skills and application competencies from introductory through intermediate, culminating with advanced graduate level units. They focus on developing your knowledge, practice and higher-order thinking to an advanced level.

Complementary Studies Options

Complementary studies may be taken as a Second Major of 96 credit points or two Minors of 48 credit points each. Experiential minors in Work Integrated Learning as well as student exchange are also available.

Second Majors

A second major provides the opportunity for you to undertake significant studies in a second Urban Development discipline such as Property Economics, Construction Management, Architectural Studies, Accountancy, Applied Economics and Finance. Second majors are also designed to provide diverse professional skills and knowledge beyond the traditional reaches of the built environment curriculum and can offer a range of study options in other fields.

Minors

Minors will allow you undertake studies in a companion discipline. They are designed to provide you with introductory to intermediate level knowlege and skills in areas complementary to your studies. You can choose a minor from other built environment disciplines. There are also minors designed to distinguish students in the employment marketplace with complementary 'non-discipline' skills and competencies that you can choose from a range of inter- and intra-faculty disciplines.

Pathways to Further Study

The (UD01) Bachelor of Urban Development (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Masters and/or Doctoral level programs.

Sample Structure Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
 Year 2, Semester 2
- Year 3, Semester 1
- Year 3, Semester 2
- Year 4, Semester 1
- Year 4, Semester 2



Bachelor of Urban Development (Honours) (Urban and Regional Planning)

UXH433

2nd Major/Minor unit

Regional Planning

| CodeTitleYear 1, Semester 1USB100Understanding the Built EnvironmentUXB130History of the Built EnvironmentUXB131Imagine Planning and DesignUXB132Urban AnalysisYear 1, Semester 2BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester 1UXB230Site PlanningUXB231Planning Processes2nd Major/Minor | | | |
|--|--------------------|----------------------|--|
| USB100Understanding the Built EnvironmentUXB130History of the Built EnvironmentUXB131Imagine Planning and DesignUXB132Urban AnalysisYear 1, Semester 7BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester 7UXB230Site Planning Processes2nd Major/Minor T2nd Major/Minor TYear 2, Semester 7UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor TYear 3, Semester 7USB300Property DevelopmentUXB330Urban Design2nd Major/Minor TYear 3, Semester 7USB300Property DevelopmentUXB330Urban Design2nd Major/Minor TYear 3, Semester 7UXB301Environmental Analysis and PlanningUXB311Environmental Analysis and PlanningUXB32Transport PlanningUXH331Research Methods Built EnvironmentUXH300Research Project 1 - Part AUXH400-1Research Project 1 - Part BUXH400-2Research Project 1 - Part B | | | |
| USB100Built EnvironmentUXB130History of the Built EnvironmentUXB130Imagine Planning and DesignUXB131Imagine Planning and DesignUXB132Urban AnalysisYear 1, Semester 2BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester 1UXB230Site Planning Processes2nd Major/Minor utYear 2, Semester 2UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor ut2nd Major/Minor Ut2nd Major/Minor Ut2nd Major/Minor Ut2nd Major/Minor UtYear 3, Semester 1USB300Urban DesignUXB330Urban Design2nd Major/Minor UtYear 3, Semester 2UXB301Urban Design2nd Major/Minor UtYear 3, Semester 2UXB301Urban Design2nd Major/Minor UtYear 3, Semester 2UXB301Urban Design2nd Major/Minor UtYear 4, Semester 2UXH331Research Nethods Built EnvironmentUXH300Research Methods Built EnvironmentUXH430Planning Theory and EthicsUXH431Urban PlanningYear 4, Semester 2UXH400-2Research Project 1 - Part B | Year 1, Semester | | |
| UXB130History of the Built EnvironmentUXB131Imagine Planning and DesignUXB132Urban AnalysisYear 1, Semester -BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester -UXB230Site Planning Processes2nd Major/Minor | USB100 | | |
| UXB131Imagine Planning and DesignUXB132Urban AnalysisYear 1, Semester /BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester /UXB230Site Planning Processes2nd Major/Minor // Year 2, Semester /UXB231Planning Processes2nd Major/Minor // Year 2, Semester /UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor // Year 3, Semester /Vear 3, Semester /USB300Urban DesignUXB330Urban DesignUXB330Urban DesignUXB301Environmental Analysis and PlanningSEB701 Work Integrated Learning is replaced by UXB// Trom S2, 2017UXH331Research Methods Built Environmental Analysis and PlanningUXH331Research Methods Built Environmental Analysis and PlanningUXH300Research Methods Built Environmental Analysis and PlanningUXH400-1Research Project 1 - Part AUXH430Vrban Planning PracticeVart 4, Semester / Part B | UXB130 | History of the Built | |
| UXB132Urban AnalysisYear 1, Semester /BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester /UXB230Site Planning Processes2nd Major/Minor //Planning Processes2nd Major/Minor //Year 2, Semester /UXB231Planning Processes2nd Major/Minor //Year 3, Semester /UXB233Planning Law2nd Major/Minor //Year 3, Semester /USB300Property DevelopmentUXB330Urban Design2nd Major/Minor //Year 3, Semester /UXB330Urban Design2nd Major/Minor //Year 3, Semester /UXB301Work Integrated Learning Built Environmental Analysis and PlanningUXH331Research Project 1UXH330Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH431Urban PlanningUXH400-2Research Project 1 - Part B | UXB131 | Imagine Planning and | |
| Year 1, Semester 2BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester 1UXB230UXB231Planning Processes2nd Major/Minor unitPlanning Processes2nd Major/Minor UnitYear 2, Semester 2UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor UnitPlanning Law2nd Major/Minor UnitYear 3, Semester 1USB300Property DevelopmentUXB330Urban Design2nd Major/Minor UnitYear 3, Semester 1USB300Vork Integrated Learning Built EnvironmentYear 3, Semester 2Work Integrated Learning Built EnvironmentYear 3, Semester 2UXB301UXB301Environmental Analysis and PlanningUXH331Research Methods Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB31 from S2, 2017UXH331PlanningUXH331Vrasport PlanningUXH330Vrban PlanningUXH430Planning Theory and EthicsUXH430Planning Theory and EthicsUXH431Wrban PlanningYear 4, Semester 2Vear 4, Semester 2UXH400-2Research Project 1 - Part B | UXB132 | 0 | |
| BSB113EconomicsLWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester IVarban StudiesUXB230Site Planning Processes2nd Major/Minor UTPlanning Processes2nd Major/Minor UTVarban Studien and Conflict ResolutionUXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor UTPlanning Law2nd Major/Minor UTProperty DevelopmentUXB330Urban DesignUXB330Urban Design2nd Major/Minor UTPlanning Built EnvironmentYear 3, Semester IVarban DesignUXB330Urban Design2nd Major/Minor UTPlanningSeB701 Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB31Forwironmental Analysis and PlanningUXH331Research Methods Built EnvironmentVAB322Transport PlanningUXH300Research Methods Built EnvironmentUXH430Virban PlanningUXH430Virban PlanningUXH431Urban PlanningVart ANalysisUXH400-2Research Project 1 - Part B | | - | |
| LWS012Urban Development LawUXB133Urban StudiesUXB134Land Use PlanningYear 2, Semester IUXB230UXB231Planning Processes2nd Major/Minor unitPlanning Processes2nd Major/Minor UnitVear 2, Semester IUXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor unitImage: Semester IUXB233Planning Law2nd Major/Minor unitImage: Semester IUSB300Property DevelopmentUXB330Urban Design2nd Major/Minor unitImage: Semester IUSB300Urban Design2nd Major/Minor UnitImage: Semester IUSB300Urban Design2nd Major/Minor UnitImage: Semester IUXB330Urban Design2nd Major/Minor UnitImage: Semester IUXB301EnvironmentSEB701 Work Integrated Learning is replaced by UXB31 from S2, 2017UXH331Environmental Analysis and PlanningUXH332Transport PlanningUXH331Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Urban PlanningUXH431Urban PlanningYear 4, Semester ZImage: Semester ZUXH400-2Research Project 1 - Part B | | | |
| UXB134Land Use PlanningYear 2, SemesterPlanning Processes2nd Major/MinorPlanning Processes2nd Major/MinorVear 2, SemesterYear 2, SemesterVear 2, SemesterUXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/MinorVear 3, SemesterYear 3, SemesterVear 3, SemesterUSB300Urban Design2nd Major/MinorVear 0, SemesterUXB330Urban Design2nd Major/MinorVear 10, SemesterUXB300Urban Design2nd Major/MinorVear 3, SemesterUXB301Urban Design2nd Major/MinorVear 10, SemesterVara 3, SemesterVear 10, SemesterUXB301EnvironmentSEB701 Work Integrated Learning is replaced by UXB301From S2, 2017UXH331Environmental Analysis and PlanningUXH331Environmental Analysis and PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Planning Theory and EthicsUXH430Planning Theory and EthicsUXH400-2Research Project 1 - Part B | LWS012 | | |
| Year 2, Semester 1UXB230Site PlanningUXB231Planning Processes2nd Major/Minor unitYear 2, Semester 2UXB232Negotiation and Conflict ResolutionUXB232Negotiation and Conflict ResolutionUXB232Planning Law2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester 1USB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester 2UXB301Environmental Analysis and PlanningUXB301Environmental Analysis and PlanningUXH331Research Planning PlanningUXH332Transport PlanningUXH300Research Methods Built EnvironmentUXH430Planning Theory and EthicsUXH431Urban PlanningUXH400-2Research Project 1 - Part B | UXB133 | Urban Studies | |
| UXB230Site PlanningUXB231Planning Processes2nd Major/MinorI2nd Major/MinorIYear 2, SemesterVUXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/MinorII2nd Major/MinorII2nd Major/MinorVYear 3, SemesterVYear 3, SemesterVUSB300Property DevelopmentUXB330Urban Design2nd Major/MinorII2nd Major/MinorVYear 3, SemesterVYear 3, SemesterVYear 3, SemesterVYear 3, SemesterVVXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB311 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXH300Research Methods Built EnvironmentalUXH400-1Research Project 1 - Part AUXH431Urban PlanningUXH431Vrban PlanningUXH400-2Research Project 1 - Part B | UXB134 | Land Use Planning | |
| UXB231 Planning Processes 2nd Major/Minor unit Planning Value 2nd Major/Minor unit Negotiation and Conflict Resolution VXB232 Negotiation and Conflict Resolution UXB233 Planning Law 2nd Major/Minor unit Planning Law Vagat Semester I USB300 USB300 Urban Design 2nd Major/Minor Unit Planning Built SEB701 Work Integrated Learning is replaced by UXB301 From S2, 2017 UXH331 Environmental Analysis and Planning UXH332 Transport Planning UXH430 Research Methods Built Environment UXH430 Planning Theory and Ethics UXH431 Urban Planning | Year 2, Semester | 1 | |
| 2nd Major/Minor unit 2nd Major/Minor unit Year 2, Semester 2 UXB232 Negotiation and conflict Resolution UXB233 Planning Law 2nd Major/Minor unit 2nd Major/Minor unit 2nd Major/Minor Unit Property Development UXB300 Property Development UXB300 Urban Design 2nd Major/Minor Unit 2nd Major/Minor Unit SEB701 Work Integrated Learning is replaced by UXB301 Fron S2, 2017 UXH331 Environmental Analysis and Planning UXH331 Research Methods Built Environment UXH300 Research Project 1 - Part A UXH430 Planning Theory and Ethics UXH431 Urban Planning UXH430 Urban Planning UXH400-2 Research Project 1 - Part B | UXB230 | Site Planning | |
| 2nd Major/Minor unitYear 2, Semester 2UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor UnitProperty DevelopmentVSB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor UnitProperty DevelopmentUXB300Urban Design2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor UnitProperty Development2nd Major/Minor UnitUrban Design2nd Major/Minor UnitEnvironmentSEB701 Work Integrated Learning Built EnvironmentSemesterUXH331Environmental Analysis and PlanningUXH331Research Methods Built EnvironmentUXH300Research Project 1 - Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | UXB231 | Planning Processes | |
| Year 2, Semester 2UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor UnitYear 3, Semester 1USB300Property DevelopmentUXB330Urban Design2nd Major/Minor UnitUrban Design2nd Major/Minor UnitYear 3, Semester 2UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301Fnovironmental Analysis and PlanningUXB332Transport PlanningUXH331Research Methods Built Environmental Analysis and PlanningUXH300Research Project 1 - Part AUXH430Virban PlanningUXH431Urban PlanningUXH400-2Research Project 1 - Part B | 2nd Major/Minor u | init | |
| UXB232Negotiation and Conflict ResolutionUXB233Planning Law2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor UnitProperty DevelopmentUSB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor UnitSEB701 Work Integrated Learning Built Environment2nd Najor/MinorSEB701 Work Integrated Learning is replaced by UXB301Environmental Analysis and PlanningUXH331Environmental Analysis and PlanningUXB332Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Urban Planning PracticeUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | 2nd Major/Minor u | init | |
| UXB232Conflict ResolutionUXB233Planning Law2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unitProperty DevelopmentUSB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unitProperty Development2nd Major/Minor unitProperty Development2nd Major/Minor unitProperty Development2nd Major/Minor unitProperty Development2nd Major/Minor unitProperty Development2nd Major/Minor unitProperty PropertyUXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXH332Transport PlanningUXB332Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Urban Planning PracticeUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | Year 2, Semester | 2 | |
| 2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester IUSB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester 2UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB331 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXB300Research Methods Built EnvironmentVear 4, Semester 1UXH400-1Research Project 1 - Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeVXH400-2Research Project 1 - Part B | UXB232 | | |
| 2nd Major/Minor unitYear 3, Semester 1USB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester 2UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXH332Transport PlanningUXB332Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Vlaban Planning PracticeUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | UXB233 | Planning Law | |
| Year 3, Semester 1USB300Property DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester 2Var 3, Semester 2Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXH330Research Methods Built EnvironmentUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | 2nd Major/Minor u | init | |
| USB300Property DevelopmentUXB330Urban Design2nd Major/Minor unitImage: Semester in the semistimation in the semester in the semistimation in the semi | 2nd Major/Minor u | init | |
| USB300DevelopmentUXB330Urban Design2nd Major/Minor unit2nd Major/Minor unit2nd Major/Minor unitYear 3, Semester 2UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXB332Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Urban PlanningUXH431Urban PlanningUXH400-2Research Project 1 - Part B | Year 3, Semester | 1 | |
| Provide a second | USB300 | | |
| 2nd Major/Minor unitYear 3, Semester 2Var 3, Semester 2UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXH331Transport PlanningUXB332Transport PlanningUXB332Transport PlanningUXB332Research Methods Built EnvironmentUXH300Research Project 1 - Part AUXH400-1Planning Theory and EthicsUXH431Urban Planning PracticeVAH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | UXB330 | Urban Design | |
| Year 3, Semester 2UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXB330Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH431Urban PlanningUXH431Urban PlanningUXH400-2Research Project 1 - Part B | 2nd Major/Minor u | init | |
| UXB301Work Integrated Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXH332Transport PlanningUXB332Transport PlanningUXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | 2nd Major/Minor u | init | |
| UXB301Learning Built EnvironmentSEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017WAR331Environmental Analysis and PlanningUXH331Transport PlanningUXB332Transport PlanningUXB332Transport PlanningUXB330Research Methods Built EnvironmentUXH300Research Project 1 - Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeUXH400-2Research Project 1 - Part B | Year 3, Semester | | |
| SEB701 Work Integrated Learning is replaced by UXB301 from S2, 2017UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXB332Transport PlanningUXB332Transport PlanningUXB332Research Methods Built EnvironmentUXH300Research Project 1 - Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeVAH400-2Research Project 1 - Part B | UXB301 | Learning Built | |
| UXH331Environmental Analysis and PlanningUXB332Transport PlanningUXB332Transport Planning2nd Major/Minor unitImage: Comparison of the second | | egrated Learning is | |
| UXB332Transport Planning2nd Major/Minor unitYear 4, Semester 1UXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeYear 4, Semester 2UXH400-2Research Project 1 - Part B | UXH331 | Analysis and | |
| 2nd Major/Minor unitYear 4, Semester 1UXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - UXH430Planning Theory and EthicsUXH431Urban Planning PracticeYear 4, Semester 2Research Project 1 - Part B | UXB332 | • | |
| Year 4, Semester 1UXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeYear 4, Semester 2UXH400-2UXH400-2Research Project 1 - Part B | | | |
| UXH300Research Methods Built EnvironmentUXH400-1Research Project 1 - UXH430Planning Theory and EthicsUXH431Urban Planning PracticeYear 4, Semester 2UXH400-2UXH400-2Research Project 1 - | | | |
| UXH400-1Part AUXH430Planning Theory and EthicsUXH431Urban Planning PracticeYear 4, Semester 2UXH400-2Research Project 1 - Part B | | Research Methods | |
| UXH430EthicsUXH431Urban Planning PracticeYear 4, Semester 2UXH400-2Research Project 1 - Part B | UXH400-1 | - | |
| Vear 4, Semester 2 UXH400-2 Research Project 1 - Part B | UXH430 | | |
| UXH400-2 Research Project 1 - Part B | UXH431 | • | |
| UXH400-2 Research Project 1 - Part B | Year 4, Semester 2 | | |
| UXH432 Community Planning | | Research Project 1 - | |
| | UXH432 | Community Planning | |



Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | UD10 |
| | |
| CRICOS | 080488G |
| Duration (full-time) | 1 year |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$34,900 per year full-time (96 credit points) |
| Total credit points | 96 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Andrea Blake; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirements

- A completed recognised bachelor degree in property economics or equivalent with a minimum grade point average (GPA) score of 4.5 (on QUT's 7-point scale), completed within the last five years; and
- A proposed research topic.

Research projects are subject to supervisor availability and resources available within the faculty to support the proposed research topic.

Research proposals must be submitted with your application. Applicants are asked to nominate a supervisor and topic when submitting a formal application. An application is likely to be more successful where a supervisor and topic are well matched.

International Entry requirements

Academic entry requirements

- A completed recognised bachelor degree in property economics or equivalent with a minimum grade point average (GPA) score of 4.5 (on QUT's 7-point scale), completed within the last five years; and
- A proposed research topic.

Research projects are subject to supervisor availability and resources available within the faculty to support the proposed research topic.

Research proposals must be submitted with your application. Applicants are asked to nominate a supervisor and topic when submitting a formal application. An application is likely to be more successful where a supervisor and topic are well matched.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Overview

A Property Economics (Honours) graduate will develop extensive research skills that will allow them to undertake expanded roles in the property sector in the areas of property market analysis, industry research and property trust and funds analysis.

The Honours program will allow you to select a current specific property development, valuation or financial and asset management problem or issue and develop the appropriate research skills and methods to address these issues. The advanced leadership and teamwork skills, together with expanded knowledge gained in the Honours degree will also allow the graduate to participate in a wider range of property based careers in the private and government property valuation, finance and development sectors.

Course Design

Requirements for the completion of UD10 Bachelor of Economics (Honours) are as follows:

STUDY AREA A: 96 credit points (6 units) comprising One (1) Major from the following:

- Development & Valuation
- Finance & Asset Management

Each Major is comprised of the Core units Foundations of Research adn Reviewing the Field, and the choice of either the Expanded Research Strand or the Extended Coursework Strand.

Each strand comprises of coursework and a major research project supervised by QUT staff.

Career Outcomes

The additional study at the Honours level will provide additional preparation for careers in higher level career opportunities in:

- Property Development
- Property Funds Analyst
- Property Research
- Property Valuation
- Property Finance
- Asset Management

Professional Recognition

Australian Property Institute The Valuers Registration Board of Queensland The Royal Institution of Chartered Surveyors



Bachelor of Property Economics (Honours)

Board of Valuers, Appraisers and Estate Agents, Malaysia

Pathways to Further Study

The QUT Bachelor of Science (Honours) is located at Level 8 of the Australian Qualifications Framework (AQF). Honours provides the key research pathway to postgraduate study. Completion of the BPropEc(Hons)(Dev&Val) and BPropEc(Hons)(Fin&Asset Mgt) will allow you to undertake additional research study in either a research Masters or PhD.

Domestic Course structure

You must complete 96 credit points (8 units) from one of the following study areas:

- development and valuation
- finance and asset management.

International Course structure

You must complete 96 credit points (8 units) from one of the following study areas:

- development and valuation
- finance and asset management.

Sample Structure Semesters

- Semester 1
- Semester 2
- Property Economics Honours Unit Options (Expanded Research)

| Code | Title | |
|--|-------------------------------|--|
| Semester 1 | | |
| SEB400 | Foundations of Research | |
| SEB403-1 | Honours Research Project-1 | |
| SEB402 | Project Proposal | |
| Select 12cp (1 Unit) from Property Economics Honours Unit Options | | |
| Semester 2 | | |
| SEB403-2 | Honours Research Project-2 | |
| SEB403-3 | Honours Research Project-3 | |
| SEB403-4 | Honours Research Project-4 | |
| Select 12cp (1 Unit) from Property Economics Honours Unit Options | | |
| Property Economics Honours Unit | | |
| Options (Expanded Research) | | |
| Select 12cp (1 unit) from: | | |
| SEB410 | Advanced Topic 1 | |
| SEB411 | Advanced Topic 2 | |
| UXH430 | Planning Theory | |

| | and Ethics |
|--------|-----------------------|
| UXH432 | Community Planning |
| UXH433 | Regional Planning |

Semesters

- Semester 1
- <u>Semester 2</u>
- <u>Property Economics Honours Unit</u> Options (Expanded Research)

| Code | Title | |
|--|-------------------------------|--|
| Semester 1 | | |
| SEB400 | Foundations of Research | |
| SEB403-1 | Honours Research Project-1 | |
| SEB402 | Project Proposal | |
| Select 12cp (1 Unit) from Property Economics Honours Unit Options | | |
| Semester 2 | | |
| SEB403-2 | Honours Research Project-2 | |
| SEB403-3 | Honours Research Project-3 | |
| SEB403-4 | Honours Research Project-4 | |
| Select 12cp (1 Unit) from Property Economics Honours Unit Options | | |
| Property Economics Honours Unit Options (Expanded Research) | | |
| Select 24cp (2 units) | | |
| SEB410 | Advanced Topic 1 | |
| SEB411 | Advanced Topic 2 | |
| UXH430 | Planning Theory and Ethics | |
| UXH432 | Community Planning | |
| UXH433 | Regional Planning | |

Graduate Certificate in Communication for Engineering

Handbook

| Year | 2018 |
|--|---|
| QUT code | EN60 |
| CRICOS | 096755G |
| Duration (full-time international) | 6 months |
| International fee (indicative) | 2018: \$15,900 per year full-time (48 credit points) |
| Total credit points | 48 |
| Credit points full-time sem. | 48 |
| Course Coordinator | Dr Dhammika Jalayath; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

International Entry requirements

Academic entry requirements

The minimum grade point average (GPA) requirements are based on QUT's 7.0 point scale where 4.0 is a Pass. Your bachelor degree must be completed and recognised by QUT.

Graduate Certificate in Communication for Engineering (EN60) (1 semester) and Master of Professional Engineering (EN55) (3 semesters)

Electrical or Electrical and Management majors

- Four (4) year full time bachelor degree in an electrical engineering discipline with a minimum GPA of 4.0; or
- Three (3) year full time bachelor degree an electrical engineering discipline with a minimum GPA of 4.0 and two (2) years full time professional engineering work experience. Students applying on the basis of work experience must submit a current curriculum vitae and employer statements detailing roles and responsibilities.

Graduate Certificate in Communication for Engineering (EN60) (1 semester) and Master of Professional Engineering (EN55) (3 semesters)

Mechanical or Mechanical and Management majors

- Four (4) year full time bachelor degree in mechanical engineering discipline with a minimum GPA of 4.0; or
- Three (3) year full time bachelor degree a mechanical engineering discipline with a minimum GPA of 4.0 and 2 years full time professional engineering work experience. Students applying on the basis of work experience must submit a current curriculum vitae and employer statements detailing roles and responsibilities.

Graduate Certificate in Communication for Engineering (EN60) (1 semester) and Master of Engineering Management (BN87) (2 semesters)

Four (4) year full time bachelor degree in engineering with a minimum GPA of 4.0.

Graduate Certificate in Communication for Engineering (EN60) (1 semester) and Master of Engineering (Electrical) (EN50) (2 semesters)

Four (4) year full time bachelor degree in

electrical engineering discipline with a minimum GPA of 4.0.

Graduate Certificate in Communication for Engineering (EN60) (1 semester) and Master of Engineering (Mechanical) (EN50) (2 semesters)

Four (4) year full time bachelor degree in mechanical engineering discipline with a minimum GPA of 4.0.

Graduate Certificate in Communication for Engineering (EN60) (1 semester) and Master of Project Management (PM20) (3 semesters)

Four (4) year full time bachelor degree in an engineering discipline with a GPA of 4.0.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.0 |
| Listening | 5.0 |
| Reading | 5.5 |
| Writing | 5.5 |
| Speaking | 5.0 |

International Course structure

The Graduate Certificate in Communication for Engineering is designed around set of core and discipline units to provide engineering graduates with technical, theoretical and language skills for further learning.

To graduate with a EN60 Graduate Certificate in Communication for Engineering you are required to complete 48 credit points of course units consisting of:

- 24 credit points of core communication units
- 12 credit points of core engineering units
- 12 credit points of engineering discipline units for advanced specialised knowledge and technical skills.

Your engineering discipline unit is selected from either the mechanical or electrical unit options, depending on your engineering specialisation.

No credit for prior learning will be



available for units in this course. Discipline units provide added depth and breadth in your chosen area of specialisation in an English speaking context.

Sample Structure

| Code | Title | |
|---|---|--|
| Year 1, Ser | nester 1 | |
| QCD111 | Communication 1 | |
| QCD211 | Communication 2 | |
| EGH404 | Research in Engineering Practice | |
| PLUS Select 1 unit (12 credit points) from ONE of the following specialisations: Your unit choice should reflect the engineering specialisation you will study in your Master degree. | | |
| Electrical Engineering Unit Options List | | |
| EGH440 | Power Systems Analysis | |
| EGH441 | Power System Modelling | |
| EGH442 | RF Techniques and Applications | |
| EGH443 | Advanced Telecommunications | |
| EGH444 | Digital Signals and Image Processing | |
| Mechanical Engineering Unit Options List | | |
| EGH413 | Advanced Dynamics | |
| EGH414 | Stress Analysis | |
| EGH421 | Vibration and Control | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |



Graduate Certificate in Communication for Information Technology

Handbook

| Year | 2018 |
|--|--|
| QUT code | IN17 |
| CRICOS | 086328J |
| Duration (full-time international) | 6 months |
| International fee (indicative) | 2018: \$14,200 per year course (48 credit points) |
| Total credit points | 48 |
| Course Coordinator | ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

International Entry requirements

Academic entry requirements

A completed recognised bachelor degree in information technology.

Pathway Graduate Certificate to IN20 Master of Information Technology

Students must have a completed recognised bachelor degree in information technology.

This pathway consists of *IN17 Graduate Certificate in Information Technology* (1 semester) leading to <u>IN20 Master of</u> <u>Information Technology</u> (3 semester)

Pathway Graduate Certificate to IN21 Master of Information Technology

Students must have a completed recognised bachelor degree in information technology.

For IN21 majors: *Enterprise Systems*, *Networks and Security*, the pathway will be:

 IN17 Graduate Certificate in Information Technology (1 semester) leading to <u>IN21 Master of</u> <u>Information Technology</u> (2 semesters)

For IN21 majors: *Data Science, Business Process Management, Computer Science, User Experience* and *Information Management,* the pathway will be:

 IN17 Graduate Certificate in Information Technology (1 semester) leading to <u>IN21 Master of</u> <u>Information Technology</u> (3 semesters)

Students with bachelor degrees in disciplines other than information technology could consider the <u>QC06</u> <u>University certificate in Tertiary</u> <u>Prepartion for Postgraduate Studies</u> or QUT <u>English for Academic Purposes</u> pathways.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.0 |
| Listening | 5.0 |
| Reading | 5.5 |
| Writing | 5.5 |

Speaking

5.0

Successful completion of QUT's English for Academic Purposes (EAP)(Direct Stream) with 50% or better or QC32 English for Academic Purposes 2.

Course Design

The Graduate Certificate in Communication for Information Technology will provide you with core discipline studies and communication knowledge and skills.

The course structure consists of 48 credit points of units. There are two common core communications units (24cp) and two information technology unit options (24cp) from the following information technology areas: Computer Science/Data Science, Enterprise Systems, Networks, Security, or Business Process Management.

NB: If you intend to follow a major pathway into IN20/21 MIT you should select the recommended IT units for those majors on commencment of IN17.

Pathways to Further Study

The QUT Graduate Certificate in Communication for Information Technology is located at Level 8 of the Australian Qualifications Framework (AQF). Eligible graduates may articulate from the Graduate Certificate in Communication for Information Technology into the related <u>IN20 Master</u> of Information Technology/ IN21 Master of Information Technology - Graduate Entry course.

International Course structure

The course structure consists of 48 credit points of units. There are two common core communications units (24 credit points) and two information technology unit options (24 credit points) from the following information technology areas:

- computer science/data science
- enterprise systems
- networks
- security
- business process management.

NB: You should select the recommended IT units for your chosen major on commencement of IN17.

Sample Structure

Code Title Semester 1



Graduate Certificate in Communication for Information Technology

| Core Units (24cp): | IFN643 | Computer System Security | |
|--|---------|--|--|
| QCD111 Communication 1 | IFN641 | Advanced Network | |
| QCD211 Communication 2 | | Management | |
| PLUS select 2 Units (24cp) from the | COMPUT | TER SCIENCE | |
| following unit options: (The units are grouped by specialisation as offered in the Master of Information Technology. It is important you select the units that reflect the Major you wish to study in your Masters as these units will be credited towards your MIT). If you choose to not study a major (i.e. the No Major option), please select any 2 units from the list. | IFN643 | Computer System Security | |
| | ENTERP | ENTERPRISE SYSTEMS | |
| | IFN663 | Advanced Enterprise Architecture | |
| | IFN515 | Fundamentals of Business Process Management | |
| | BUSINES | SS PROCESS MANAGEMEN | |
| | IFN515 | Fundamentals of Business Process Management | |
| NETWORKS | | | |

NETWORKS

| IFN660 | Programming Language Theory | |
|----------------------------------|--|--|
| IFN642 | Applied Cryptography and Network Security | |
| SECURITY | | |
| IFN642 | Applied Cryptography and Network Security | |
| IFN660 | Programming Language Theory | |
| COMPUTER SCIENCE/DATA SCIENCE | | |
| IFN645 | Data Mining Technology and Applications | |
| IFN660 | Programming Language Theory | |
| ENTERPRISE SYSTEMS | | |
| IFN662 | Enterprise Systems and Applications | |
| IFN650 | Business Process Analytics | |
| BUSINESS PROCESS MANAGEMENT | | |
| IFN515 | Fundamentals of Business Process Management | |
| IFN650 | Business Process Analytics | |
| | | |

Code Title Semester 2 Core Units (24cp): QCD111 Communication 1 QCD211 Communication 2 PLUS select 2 Units (24cp) from the following unit options: (The units are grouped by specialisation as offered in the Master of Information Technology. It is important you select the units that reflects the Major you wish to study in your Masters as these units will be credited towards your MIT). If you choose to not study a major (i.e. the No Major option), please select any 2 units from the list. NETWORKS Advanced Network **IFN641** Management

Computer System Security

IFN643 SECURITY

| 111043 | Computer System Security | |
|-----------------------------|--|--|
| IFN641 | Advanced Network Management | |
| COMPUTER SCIENCE | | |
| IFN643 | Computer System Security | |
| ENTERPRISE SYSTEMS | | |
| IFN663 | Advanced Enterprise Architecture | |
| IFN515 | Fundamentals of Business Process Management | |
| BUSINESS PROCESS MANAGEMENT | | |
| IFN515 | Fundamentals of Business Process Management | |
| IFN652 | Enterprise Business Process Management | |

Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | IN25 |
| Duration (part-time) | 1 year |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$10,600 per year full-time (48 credit points) |
| International fee (indicative) | 2018: \$14,500 per year full-time (48 credit points) |
| Total credit points | 48 |
| Credit points part-time sem. | 24 |
| Start months | February |
| Int. Start Months | February |
| Course Coordinator | Associate Professor Moe Wynn; email: sef.enquiry@qut.edu.au; ph: +61 7 3138 8822 |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirements

- A completed recognised bachelor degree in the field of information technology or business; *or*
- A completed recognised bachelor degree (or higher award) in any discipline *plus* five years industry experience in business, information technology or business process management.

International Entry requirements

Academic entry requirements

- A completed recognised bachelor degree in the field of information technology or business; or
- A completed recognised bachelor degree (or higher award) in any discipline *plus* five years industry experience in business, information technology or business process management.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure

To be eligible for the Graduate Certificate in Business Process Management:

- students are required to complete 48 credit points of units.
- students must complete two core BPM units (24 credit points)
- students must take two units (24 credit points) of electives from the list of approved elective units provided.

International Course

structure

To be eligible for the Graduate Certificate in Business Process Management:

- students are required to complete 48 credit points of units.
- students must complete two core BPM units (24 credit points)
- students must take two units (24 credit points) of electives from the list of approved elective units

provided.

Sample Structure

| oumpio on dotalo | | |
|--|---|--|
| Code | Title | |
| Year 1, Semester 1 | | |
| IFN515 | Fundamentals of Business Process Management | |
| IFN652 | Enterprise Business Process Management | |
| Complete any 2 (two) of the following BPM option list units | | |
| MGN505 | Consulting and Change Management | |
| IFN650 | Business Process Analytics | |
| IFN695 | Minor Project | |
| IFN651 | Lean Six Sigma | |



Graduate Certificate in Project Management

Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | PM15 |
| CRICOS | 084926C |
| Duration (full-time) | 6 months |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$10,700 per year course (48 credit points) |
| International fee (indicative) | 2018: \$15,900 per year course (48 credit points) |
| Total credit points | 48 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Madhav Nepal; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Entry requirements

Academic entry requirements

A completed recognised bachelor honours degree (or higher) in any discipline; *or* a completed recognised bachelor degree (or higher) in:

- engineering or built environment; or
- any other discipline with at least 6 months (full-time or equivalent) professional project management work experience; or
- any other discpline plus successful completion of two project management units: <u>Project</u> <u>Management Essentials 1</u> (PMN501) and <u>Project Management</u> <u>Essentials 2 (PMN502)</u>

or

A completed recognised advanced diploma in program or project management with at least:

- 6 years (full-time or equivalent) senior project management work experience; *or*
- 10 years (full-time or equivalent) project management work experience

International Entry requirements

Academic entry requirements

A completed recognised bachelor degree (or higher) in:

• engineering or built environment disciplines; *or*

A completed recognised bachelor degree in any discipline; *and*

 at least six months (full-time or equivalent) professional project management work experience in any discipline.

Students applying on the basis of work experience must submit a detailed CV, position details and employment statements; *or*

A completed recognised graduate certificate, graduate diploma, masters or Australian honours in any discipline.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |

| Writing | 6.0 |
|----------|-----|
| Speaking | 6.0 |

Course Overview

The Graduate Certificate in Project Management delivers fundamental Project Management skills to those wishing to advance their knowledge in the discipline. It is designed for, both, individuals seeking to work in project management areas and for those already working in positions requiring project management.

With this course you will gain a depth of specialised knowledge and skills to manage projects across multiple industry sectors.

Designed to offer flexible study choices, the course is available fully on-line or face to face on campus. See the Study Choices information below for more detail on how you can study this course.

Course Design

The QUT Graduate Certificate in Project Management degree is designed around a set of core project management topics that underpin the knowledge required for practice and/or further learning.

The course will provide you with advanced and specialised discipline knowledge and skills to apply appropriate solutions to project management problems. You will learn how to communicate effectively within various social, cultural and professional contexts across and within stakeholder and discipline groups.

The course structure consists of 48 credit points (4 units) of core units that can be completed in one semester of study.

Two of the units should be completed in this order:

PMN501 Project Management Essentials 1, in the first half of the semester, followed by PMN502 Project Management Essentials 2 in the second half of the semester.

Study Choices

You can study the Graduate Certificate in Project Management internally on campus at Gardens Point or externally Online. Depending on your location, you may choose to study some, or all, units Online or you may choose to attend in class at Gardens Point. When you selfenrol in a unit you must select from the

Graduate Certificate in Project Management

list of attendance modes available that matches how you wish to study that unit. If you select the online study mode for a unit, your studies will all take place electronically, off campus. If you select to study a unit internally, you will be required to attend scheduled classes on campus.

Studying On Campus (Internally)

There are different ways you can study some project management units internally. You will be able to identify which type of internal study is offered when you self-enrol in a unit. If the unit is described as 'Internal' this typically indicates a standard delivery mode where classes will be scheduled each week for the duration of the specified teaching period. If a unit is described as Internal Block Mode, this indicates that it will be delivered in an intensive learning mode, such as whole day or weekend sessions or seminars. Please ensure you check your session dates.

Special Course Requirements

Students wishing to undertake online studies will require access to the necessary technology to facilitate this mode of study.

Pathways to Further Study

The QUT Graduate Certificate in Project Management is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates will be eligible for entry into the Master of Project Management with a reduced course duration of 1 year.

Professional Membership

Endorsed by the Australian Institute of Project Management (AIPM).

Domestic Course structure

The QUT Graduate Certificate in Project Management degree is designed around a set of core project management topics that underpin the knowledge required for practice and/or further learning.

The units will provide you with advanced and specialised discipline knowledge and skills to apply appropriate solutions to project management problems. You will learn how to communicate effectively within various social, cultural and professional contexts across and within stakeholder and discipline groups.

The course structure consists of 48 credit points (4 units) of core units that can be completed in one semester of study.

Two of the units should be completed in this order:

PMN501 Project Management Essentials 1, in the first half of the semester, followed by PMN502 Project Management Essentials 2 in the second half of the semester.

Special course requirements

Designed to offer flexible study choices, the units will be available fully on-line or face to face on campus. You may also choose blend these options. Students wishing to undertake online studies will require access to the necessary technology to facilitate this mode of study.

Pathways to further study

The QUT Graduate Certificate in Project Management is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates will be eligible for entry into the Master of Project Management with a reduced course duration of one year.

International Course structure

The QUT Graduate Certificate in Project Management degree is designed around a set of core project management topics that underpin the knowledge required for practice and/or further learning.

The units will provide you with advanced and specialised discipline knowledge and skills to apply appropriate solutions to project management problems. You will learn how to communicate effectively within various social, cultural and professional contexts across and within stakeholder and discipline groups.

The course structure consists of 48 credit points (4 units) of core units that can be completed in one semester of study.

Two of the units should be completed in this order:

PMN501 Project Management Essentials 1, in the first half of the semester, followed by PMN502 Project Management Essentials 2 in the second half of the semester.

Special Course Requirements

Designed to offer flexible study choices, the units will be available fully on-line or face to face on campus. You may also choose blend these options. Students wishing to undertake online studies will require access to the necessary technology to facilitate this mode of study.

Pathways to further study

The QUT Graduate Certificate in Project Management is located at Level 8 of the Australian Qualifications Framework (AQF). Graduates will be eligible for entry into the Master of Project Management with a reduced course duration of 1 year.

Sample Structure

| Code | Title | |
|----------------------------|------------------------------------|--|
| Full-time course structure | | |
| PMN501 | Project Management Essentials 1 | |
| PMN502 | Project Management Essentials 2 | |

Core unit PMN501 is assumed knowledge for PMN502, and should be taken in the first half of the semester of study before attempting PMN502 in the second half of the semester.

| PMN503 | Systems in Project Management |
|--------|----------------------------------|
| PMN504 | People and Projects |



QUT

Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | PH71 |
| CRICOS | 020315D |
| Duration (full-time) | 1 year |
| Duration (part-time) | 2 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,100 per year full-time (96 credit points) |
| Total credit points | 96 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirements

A completed recognised bachelor degree in physics (or equivalent qualification) or other evidence of qualifications that satisfactorily demonstrate you possess the capacity to pursue the course of study.

International Entry requirements

Academic entry requirements A completed recognised bachelor degree (or higher award) in physics.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Career Outcomes

Graduates can seek employment in hospitals, health departments, tertiary institutions and medical instrumentation companies. Depending on the field of employment, graduates may be known as a medical physicist, health physicist or bio-engineer.

Professional medical/health physicists: - apply electronic tools and medical software, ultrasonics, radiation and computers to clinical and environmental problems

- monitor the environment to maintain acceptable standards in the workplace and the community

- apply fundamental physical research in development programs

- are responsible for calibration, care and maintenance of instruments and apparatus.

Course Design

Stage 1— Graduate Diploma (PH71) comprises assessed coursework such as advanced lectures, seminars, reading units or independent study. Full-time students will need an average of 14 hours a week of formal contact (seven hours for parttime students). Students can graduate with a Graduate Diploma in Medical Physics after satisfactory completion of Stage 1.

Stage 2— Master of Applied Science (PH80) students undertake a program of supervised research and investigation that can be completed at QUT or in a suitable external institution.

Professional Recognition

The course is accredited by the Australasian College of Physical Sciences and Engineers in Medicine.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Domestic Course structure

Stage 1—Graduate Diploma (PH71) comprises assessed coursework such as advanced lectures, seminars, reading units or independent study. Full-time students will need an average of 14 hours a week of formal contact (seven hours for part-time students). Students can graduate with a Graduate Diploma in Medical Physics after satisfactory completion of Stage 1.

Stage 2—Master of Applied Science (PH80) students undertake a program of supervised research and investigation that can be completed at QUT or in a suitable external institution.

International Course structure

Stage 1—Graduate Diploma (PH71) comprises assessed coursework such as advanced lectures, seminars, reading units or independent study. Full-time students will need an average of 14 hours a week of formal contact (seven hours for parttime students). Students can graduate with a Graduate Diploma in Medical Physics after satisfactory completion of Stage 1.

Stage 2—Master of Applied Science (PH80) students undertake a program of supervised research and investigation that can be completed at QUT or in a suitable external institution.

Sample Structure

| Code | Title |
|---------------------------------------|-------------------------------------|
| Year 1, Semester 1 (February to June) | |
| LSN104 | Advancing Anatomy and Physiology |
| PCN113 | Radiation Physics |
| ENN515 | Total Quality |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=PH71&courseID=32904. CRICOS No.00213J

Graduate Diploma in Applied Science (Medical Physics)

| | Management | |
|--------------------------------------|---|--|
| PCN211 | Physics of Medical Imaging | |
| Year 1, Semester 2 (July to October) | | |
| PCN112 | Medical Imaging Science | |
| PCN212 | Radiotherapy | |
| PCN214 | Health and Occupational Physics | |
| PCN218 | Research Methodology and Professional Studies | |



Master of Engineering Management

Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | BN87 |
| CRICOS | 006368G |
| Duration (full-time) | 1 year |
| Duration (part-time) | 2 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$21,200 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$30,500 per year full-time (96 credit points) |
| Total credit points | 96 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Azharul Karim |
| Discipline Coordinator | Science and Engineering Faculty +61 7 3138 8822 sef.enquiry@qut.edu.au |

Domestic Entry requirements Academic entry requirements

A completed recognised four-year fulltime bachelor degree in a relevant engineering discipline with a minimum grade point average (GPA) score of 4.0 on QUT's 7-point scale.

International Entry requirements

Academic entry requirements

- A completed recognised four-year full-time bachelor degree in a relevant engineering discipline with a minimum grade point average (GPA) score of 4.0 on QUT's 7-point scale; or
- A completed recognised three-year full-time bachelor degree in a relevant engineering discipline with a minimum grade point average (GPA) score of 4.0 on QUT's 7-point scale and two years full-time professional engineering work experience.*

*Students applying on the basis of work experience must submit a current curriculum vitae and employer statements detailing roles and responsibilities.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Structure

To graduate with a Master of Engineering Management you are required to complete 96 credit points (8 units) consisting of:

48 credit points of core engineering management postgraduate units, including a 12 credit point advanced research skills unit and 24 credit points of research based project units

and;

48 credit points of engineering management discipline units.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Early Exit Options

Please note: There is no early exit option available for students that enter the BN87 progam from 2015 onwards.

Pathways to Further Study

The Master of Engineering Management is located at level 9 of the Australian Qualifications Framework. Graduates that meet the GPA requirements, may be eligible to apply for discipline relevant Doctoral level studies.

International Combined Masters Packages

Students admitted to a combined masters pathway (BN87 + EN50 or BN87 + PM20) may progress to their second degree on completion of the first, and are referred to the combined package study plan for their chosen combination, available on the course websites. Separate awards are granted for each degree completed.

Domestic Course structure Course Structure

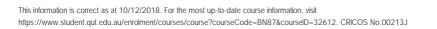
To graduate with a Master of Engineering Management you are required to complete 96 credit points (8 units) consisting of:

60 credit points of core engineering management postgraduate units, including advanced research skills and a capstone project that includes industry based research, a professional practice unit and an advanced discipline unit. Plus 36 credit points of advanced discipline and management units to be selected from a list of options.

International Course structure

To graduate with a Master of Engineering Management you are required to complete 96 credit points (8 units) consisting of:

60 credit points of core engineering management postgraduate units, including advanced research skills and a capstone project that includes industry based research, a professional practice unit and an advanced discipline unit. Plus 36 credit points of advanced discipline





Master of Engineering Management

and management units to be selected from a list of options.

Combined masters packages for international students

If you are admitted to either of:

- Master of Engineering Management and Master of Engineering package
- Master of Engineering Management and Master of Project Management package

You can progress to the second degree on completion of the first.

You will receive an award for each degree completed.

Follow the standard study plan for your first program. Refer to the combined package course structure of your chosen second year degree for unit details.

International Student Entry

You must maintain an enrolment program that will allow you to complete your course within the specified timeframe of your electronic Confirmation of Enrolment (eCoE)

Sample Structure

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Select 24CP (2 units) from the Engineering Management Unit Options List 1
- Select 12CP (1 unit) from the Engineering Management Unit Options List 2

| Code | Title | |
|--|-------------------------------------|--|
| Year 1, Semester 1 | | |
| ENN541 | Research Methods for Engineers | |
| ENN591-1 | Project 1 | |
| PMN610 | Project Management Principles | |
| OR Engineering Management Option Unit | | |
| Engineering Manag | ement Option Unit | |
| Year 1, Semester 2 | | |
| ENN570 | Enterprise Resource Planning | |
| ENN591-2 | Project 2 | |
| PMN610 | Project Management Principles | |
| OR Engineering Management Option Unit | | |

Engineering Management Option Unit Select 24CP (2 units) from the Engineering Management Unit Options List 1

| ENN510 | Engineering Knowledge Management | |
|--|--|--|
| ENN515 | Total Quality Management | |
| ENN530 | Asset and Facility Management | |
| Select 12CP (1 unit) from the Engineering Management Unit Options List 2 | | |
| AMN430 | International Logistics Management | |
| ENN510 | Engineering Knowledge Management | |
| ENN515 | Total Quality Management | |
| ENN530 | Asset and Facility Management | |
| MGN441 | Leadership and Executive Coaching | |
| MGN505 | Consulting and Change Management | |
| PMN504 | People and Projects | |
| PMN601 | Projects and Performance | |

Combined Masters Packages: Master of Engineering (EN50) plus Master of Engineering Management (BN87)

If you are admitted to this pathway, once you have completed your Master of Engineering (EN50) including BEN610/PMN610 Project Management Principles, you may progress to the Master of Engineering Management (BN87) with 24 credit points of advanced standing.

Please follow the study plan below for your combined package.

Engineering Management (BN87) plus Master of Engineering (EN50) OR Master of Engineering Management (BN87) plus Master of Project Management (PM20)

If you are admitted to one of these pathways, once you successfully complete your Master of Engineering Management (BN87), you may progress to your second program.

Please refer to the relevant course site (EN50 or PM20) for further information regarding your second degree and follow

the study plan for your combined package.

Semesters

- <u>Combined Masters Program Year</u>
 2
- BN87 Study Plan for EN50 Master of Engineering Graduates
- Engineering Management Unit Options List

Code Title

Combined Masters Program - Year 2

To undertake BN87 Master of Engineering Management in Year 2 of your combined masters program, you will have completed EN50 Master of Engineering program in Year 1. Please follow the study plan below, including advanced standing, for your Year 2 BN87 program.

BN87 Study Plan for EN50 Master of Engineering Graduates

February Entry

Year 2, Semester 1 ENN591

-1 Project 1

Option unit - select from unit options list Option unit - select from unit options list Year 2, Semester 2

ENN591 -2 Project 2

ENN570 Enterprise Resource Planning Option unit - select from unit options list Mid Year Entry

Year 2, Semester 2

ENN591 -1 Project 1

ENN570 Enterprise Resource Planning Option unit - select from unit options list Year 3. Semester 1

ENN591 -2 Project 2

Option unit - select from unit options list Option unit - select from unit options list Engineering Management Unit Options List Select 36CP from the following: Select 24CP (2 units) from ENN510 Engineering Knowledge

| ENN510 | Engineering Knowledge Management | |
|---------------------------|--------------------------------------|--|
| ENN515 | Total Quality Management | |
| ENN530 | Asset and Facility Management | |
| Select 12CP (1 unit) from | | |
| PMN601 | Projects and Performance | |
| PMN504 | People and Projects | |
| MGN44 1 | Leadership and Executive Coaching | |



Master of Engineering Management

| ENN515 | Total Quality Management |
|------------|---------------------------------------|
| ENN510 | Engineering Knowledge Management |
| MGN50 5 | Consulting and Change Management |
| AMN430 | International Logistics Management |
| ENN530 | Asset and Facility Management |



QUT

Handbook

| Year | 2018 |
|---------------------------|---|
| QUT code | BX30 |
| CRICOS | External Study Only |
| Duration (part-time) | 4 years |
| Total credit points | 96 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Mr Mike Garrett; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Science and Engineering Faculty 3138 8822 sef.enquiry@qut.edu.au |

Domestic Entry requirements Academic entry requirement

A completed recognised four-year fulltime bachelor degree in a civil engineering related field or a three-year full-time diploma and three or more years of relevant professional experience in the railway industry with a minimum grade point average (GPA) of 4.0 (on QUT's 7 point scale).

Note

Entry to this course is open to employees of companies conducting business in the railway industry and whose employer is prepared to sponsor or support their study of this course. That is, applicants must be working in the railway industry and have the support of their employer.

International Entry requirements Academic entry requirement

A completed recognised four-year fulltime bachelor degree in a civil engineering related field or a three-year full-time diploma and three or more years of relevant professional experience in the railway industry with a minimum grade point average (GPA) of 4.0 (on QUT's 7 point scale).

Note

Entry to this course is open to employees of companies conducting business in the railway industry and whose employer is prepared to sponsor or support their study of this course. That is, applicants must be working in the railway industry and have the support of their employer.

Minimum English

requirements Students must meet the English

proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.0 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Why study Railway Infrastructure

study part-time by flexible online

learning - wherever you are in the world

- developed exclusively for engineers
- employed in the rail industry
- designed by Australian rail industry and

academic personnel and fully endorsed by Rail Innovation Australia - comprehensive best-practice learning material from one of the world's leading heavy haul nations

- study individual units through <u>Continuing</u> <u>Professional Education</u>.

Overview

Developed as a cooperative project between the rail industry and the Queensland University of Technology, this course captures the knowledge and expertise of civil infrastructure engineers working in the Australian rail industry. It is provided as a professional development program for people working in the rail industry. Graduates will gain skills and knowledge in a range of areas related to the design, construction, maintenance and management of railway infrastructure. The degree offers both theoretical understanding and practical applications of advanced professional practice.

Course Structure

To graduate with a Master of Engineering (Railway Infrastructure) you are required to complete 96 credit points (8 units) consisting of:

96 credit points of core engineering railway infrastructure discipline units, including a 12 credit point advanced research skills unit and a 12 credit point research-based project unit.

Study Mode

The course is delivered via flexible online learning suitable for mature age students studying part-time and working full-time .There are no on-campus classes and you can complete the course from any location world-wide. You will study using a combination of online, CD and print material and submit assignments for assessment.

Further Information

Please visit <u>here</u> to find out how to apply and to register for the newsletter.

Early Exit Option

An early exit with BX31 - Graduate Certificate in Engineering (Railway Infrastructure) is available.



Master of Engineering

Handbook

| Year | 2018 |
|-----------------------------------|--|
| QUT code | EN50 |
| CRICOS | 060811A |
| Duration (full-time) | 1 year |
| Duration (part-time) | 2 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$21,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$30,200 per year full-time (96 credit points) |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Dhammika Jayalath; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Dr Jacob Coetzee (Networking & Communications), Dr Wijitha Senadeera (Mechanical) 3138 8822 sef.enquiry@qut.edu.au |

Domestic Entry requirements Academic entry requirements

A completed recognised four year fulltime bachelor degree in an electrical or mechanical engineering or a related engineering area with a minimum grade point average (GPA) of 4.00 (on QUT's 7point scale).

The following areas would meet the 'related engineering area' requirement:

- Aerospace
- Aircraft Maintenance
- Aviation, Automotive
- Biomedical
- Chemical and Materials
- Chemical and Metallurgical
- Communication
- Computer
- Electrical
- Electronic
- Electronic and Biomedical
- Energy
- Industrial
- Information and Communications Technology
- Instrumentation and Control
- Manufacturing
- Marine
- Maritime
- Materials
- Mechanical
- MechatronicMedical
- Microelectronic
- Microelectro
 Mining
- Mining
- Naval Architecture
- Ocean
- Photonics
- Photovoltaic and Solar Energy
- Power
- Process
- Product Design
- Renewable Energy
- Robotic Software
- Telecommunications
- Tool making
- Wireless

International Entry requirements

Academic entry requirements

A completed recognised four year fulltime bachelor degree in an electrical or mechanical engineering or a related engineering area with a minimum grade point average (GPA) of 4.00 (on QUT's 7point scale); or

A completed recognised three year fulltime bachelor degree in an electrical or mechanical engineering area or a related engineering area with a minimum grade point average (GPA) score of 4.00 (on QUT's 7-point scale) *and* two years full time professional work experience in electrical or mechanical engineering.*

*Students applying on the basis of work experience must submit a current curriculum vitae and employer statements detailing roles and responsibilities.

The following areas would meet the 'related engineering area' requirement:

- Aerospace
- Aircraft Maintenance
- · Aviation, Automotive
- Biomedical
- Chemical and Materials
- Chemical and Metallurgical
- Communication
- Computer
- Electrical
- Electronic
- · Electronic and Biomedical
- Energy
- Industrial
- Information and Communications Technology
- Instrumentation and Control
- Manufacturing
- Marine
- Maritime
- Materials
- Mechanical
- Mechatronic
- Medical
- Microelectronic
- Mining
- Naval Architecture
- Ocean
- Photonics
- Photovoltaic and Solar Energy
- Power
- Process
- Product Design
- Renewable Energy
- Robotic Software
- Telecommunications
- Tool making
- Wireless

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|---|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Course Structure

To graduate with a Master of Engineering students are required to complete 96 credit points (8 units) of course units.

a) 2 Core units + 2 Project units (of a



Master of Engineering

specialisation area) + at least 3 electives with the same specialisation tag to claim Master of Engineering (Specialisation*); or

b) 2 Core units + 2 Project units + any 4 electives to claim Master of Engineering, i.e. no specialisation (Students fulfilling the specialisation requirement may choose not to have a specialisation in the award title)

- *Specialisation options include:
- Mechanical Engineering
- Networking & Communications

Assumed Knowledge

It is assumed upon entry to the Masters program that students are proficient in prerequisite knowledge relevant to the intended Study Area A:

• **Mechanical Engineering:** students are assumed to be proficient in the general areas of mechanical engineering, metallurgy, materials or relevant disciplines.

• Networking & Communications: students are assumed to be proficient in the general area of electrical, electronics, communications or relevant disciplines.

International Student Entry

International students must maintain an enrolment program that will allow them to complete their course within the specified timeframe of their eCoE (electronic Confirmation of Enrolment).

Pathways to Further Study

The Masters of Engineering is located at level 9 of the Australian Qualifications Framework. Graduates that meet the GPA requirements, may be eligible to apply for discipline relevant Doctoral level studies.

International Combined Masters Packages

Students admitted to a combined masters pathway (EN50 + PM20) may progress to their second degree on completion of the first, and are referred to the combined package study plan for their chosen combination, available on the course websites. Separate awards are granted for each degree completed.

Professional Recognition

The Master of Engineering is a postprofessional qualification and, as such, is beyond the usual qualifications required for membership of professional organisations.

Early Exit Options

Please note: There is no early exit option available for students that enter the EN50 progam from 2015 onwards.

Domestic Course structure

The Master of Engineering offers two study areas (majors) - Mechanical Engineering and Electrical Engineering.

To graduate with a Master of Engineering you are required to complete 96 credit points of course units consisting of:

60 credit points of core engineering postgraduate units, including advanced research skills and a capstone project that includes industry based research, a professional practice unit and an advanced discipline unit. Plus 36 credit points of advanced discipline and units from your specialisation (mechanical or electrical) to be selected from a list of options.

Option units provide added depth and breadth in your chosen discipline area, as such you should select an alternate unit if you have completed a similar or equivalent unit in your previous studies.

International Course structure

The Master of Engineering offers two study areas (majors) - Mechanical Engineering and Electrical Engineering.

To graduate with a Master of Engineering you are required to complete 96 credit points of course units consisting of:

60 credit points of core engineering postgraduate units, including advanced research skills and and a capstone project that includes industry based research, a professional practice unit and an advanced discipline unit. Plus 36 credit points of advanced discipline and units from your specialisation (mechanical or electrical) to be selected from a list of options.

Option units provide added depth and breadth in your chosen discipline area, as such you should select an alternate unit if you have completed a similar or equivalent unit in your previous studies.

Combined masters packages for international students

If you are admitted to either of:

- Master of Engineering and Master of Project Management package
- Master of Engineering Management and Master of Engineering package

You can progress to the second degree

on completion of the first.

You will receive an award for each degree completed.

Follow the standard study plan for your first program. Refer to the combined package course structure of your chosen second year degree for unit details.

International Student Entry

You must maintain an enrolment program that will allow you to complete your course within the specified timeframe of your electronic Confirmation of Enrolment (eCoE)

Sample Structure Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- <u>Electrical Engineering Major Unit</u> <u>Options List</u>
- Mechanical Engineering Major Unit Options List

| Code | Title | |
|---|------------------------------------|--|
| Year 1, Se | emester 1 | |
| ENN541 | Research Methods for Engineers | |
| ENN590- 1 | Project 1 | |
| PMN610 | Project Management Principles | |
| OR Electri Major Opti | cal/Mechanical Engineering on Unit | |
| Electrical/Mechanical Engineering Major Option Unit | | |
| Year 1, Semester 2 | | |
| ENN590- 2 | Project 2 | |
| ENN543 | Data Analytics and Optimisation | |
| PMN610 | Project Management Principles | |
| OR Electrical/Mechanical Engineering Major Option Unit | | |
| Electrical/Mechanical Engineering Major Option Unit | | |
| Electrical Engineering Major Unit Options List | | |
| NOTE: Option units provide added depth and breadth in your chosen discipline | | |

NOTE: Option units provide added depth and breadth in your chosen discipline area, as such you should select an alternate unit if you have completed a similar or equivalent unit in your previous studies.

Select 36CP (3 units) from the Electrical Engineering Unit Options List:

(The units are grouped in areas to assist you in focusing your studies.)



Master of Engineering

POWER units:

| EGH440Power Systems AnalysisEGH441Power System ModellingEGH441Power ElectronicsNETWORKS and COMMUNICATIONS units:EGH442RF Techniques and ApplicationsEGH443Advanced TelecommunicationsEGH444Digital Signals and Image ProcessingENN523Advanced Network EngineeringENN524Mobile Network EngineeringCONTROL SYSTEMS units:EGH445Modern ControlEGH446Autonomous SystemsELECTRONICS units:EGH449Advanced ElectronicsEGH446Embedded SystemsMechanical Engineering Major Unit Options ListNOTE: Option units provide added dept and breadth in your chosen discipline | POWER units: | | |
|--|--------------------------|----------------------------|--|
| EGH448Power ElectronicsNETWORKS and COMMUNICATIONS units:EGH442RF Techniques and ApplicationsEGH443Advanced TelecommunicationsEGH444Digital Signals and Image ProcessingENN523Advanced Network EngineeringENN524Mobile Network EngineeringCONTROL SYSTEMS units:EGH445Modern ControlEGH446Autonomous SystemsELECTRONICS units:EGH449Advanced ElectronicsEGH456Embedded SystemsMechanical Engineering Major Unit Options ListNOTE: Option units provide added dept | EGH440 | Power Systems Analysis | |
| NETWORKS and COMMUNICATIONS units: EGH442 RF Techniques and Applications EGH443 Advanced Telecommunications EGH444 Digital Signals and Image Processing ENN523 Advanced Network Engineering ENN524 Mobile Network Engineering CONTROL SYSTEMS units: EGH446 EGH446 Autonomous Systems ELECTRONICS units: EGH449 EGH456 Embedded Systems Mochanical Engineering Major Unit Options List NOTE: Option units provide added dept | EGH441 | Power System Modelling | |
| units:EGH442RF Techniques and ApplicationsEGH443Advanced TelecommunicationsEGH444Digital Signals and Image ProcessingENN523Advanced Network EngineeringENN524Mobile Network EngineeringCONTROL SYSTEMS units:EGH445Modern ControlEGH446Autonomous SystemsELECTRONICS units:EGH449Advanced ElectronicsEGH456Embedded SystemsMechanical Engineering Major Unit Options ListNOTE: Option units provide added dept | EGH448 Power Electronics | | |
| EGH442ApplicationsEGH443Advanced TelecommunicationsEGH444Digital Signals and Image ProcessingENN523Advanced Network EngineeringENN524Mobile Network EngineeringCONTROL SYSTEMS units:EGH445Modern ControlEGH446Autonomous SystemsELECTRONICS units:EGH449Advanced ElectronicsEGH456Embedded SystemsMechanical Engineering Major Unit Options ListNOTE: Option units provide added dept | _ | KS and COMMUNICATIONS | |
| EGH443TelecommunicationsEGH444Digital Signals and Image ProcessingENN523Advanced Network EngineeringENN524Mobile Network EngineeringCONTROL SYSTEMS units:EGH445Modern ControlEGH446Autonomous SystemsELECTRONICS units:EGH449Advanced ElectronicsEGH456Embedded SystemsMechanical Engineering Major Unit Options ListNOTE: Option units provide added dept | EGH442 | | |
| EGH444ProcessingENN523Advanced Network EngineeringENN524Mobile Network EngineeringCONTROL SYSTEMS units:EGH445Modern ControlEGH446Autonomous SystemsELECTRONICS units:EGH449Advanced ElectronicsEGH456Embedded SystemsMechanical Engineering Major Unit Options ListNOTE: Option units provide added dept | EGH443 | | |
| ENN523EngineeringENN524Mobile Network EngineeringCONTROL SYSTEMS units:EGH445Modern ControlEGH446Autonomous SystemsELECTRONICS units:EGH449Advanced ElectronicsEGH456Embedded SystemsMechanical Engineering Major UnitOptions ListNOTE: Option units provide added dept | EGH444 | | |
| CONTROL SYSTEMS units: EGH445 Modern Control EGH446 Autonomous Systems ELECTRONICS units: EGH449 Advanced Electronics EGH456 Embedded Systems Mechanical Engineering Major Unit Options List NOTE: Option units provide added dept | ENN523 | | |
| EGH445Modern ControlEGH446Autonomous SystemsELECTRONICS units:EGH449Advanced ElectronicsEGH456Embedded SystemsMechanical Engineering Major Unit Options ListNOTE: Option units provide added dept | ENN524 | Mobile Network Engineering | |
| EGH446 Autonomous Systems ELECTRONICS units: EGH449 Advanced Electronics EGH456 Embedded Systems Mechanical Engineering Major Unit Options List NOTE: Option units provide added dept | CONTROL SYSTEMS units: | | |
| ELECTRONICS units: EGH449 Advanced Electronics EGH456 Embedded Systems Mechanical Engineering Major Unit Options List NOTE: Option units provide added dept | EGH445 | Modern Control | |
| EGH449Advanced ElectronicsEGH456Embedded SystemsMechanical Engineering Major Unit Options ListNOTE: Option units provide added dept | EGH446 | Autonomous Systems | |
| EGH456 Embedded Systems Mechanical Engineering Major Unit Options List NOTE: Option units provide added dept | ELECTRONICS units: | | |
| Mechanical Engineering Major Unit Options List NOTE: Option units provide added dept | EGH449 | Advanced Electronics | |
| Options List NOTE: Option units provide added dept | EGH456 | Embedded Systems | |
| | | | |
| area, as such you should select an alternate unit if you have completed a similar or equivalent unit in your previous studies. Select 36CP (3 units) from the | | | |

Select 36CP (3 units) from the Mechanical Engineering Unit Options List:

| EGH413 | Advanced Dynamics | |
|--------------|--|--|
| EGH420 | Mechanical Systems Design | |
| EGH422 | Advanced Thermodynamics | |
| ENN530 | Asset and Facility Management | |
| ENN531 | Advanced Materials and Engineering Applications | |
| ENN533 | Advanced Engineering Design and Maintenance | |
| ENN552 | Solar Thermal Systems - Heat and Power | |
| ENN553 | Energy Optimised Buildings and Communities | |
| Course Notes | | |

Combined Masters Packages: Master of Engineering Management (BN87) plus Master of Engineering (EN50)

If you are admitted to this pathway, once you have completed your Master of Engineering Management (BN87) including BEN610/PMN610 Project Management Principles, you may progress to the Master of Engineering (EN50) with up to 24 credit points of advanced standing. Please follow the study plan below for your combined package.

International students on the BN87 + EN50 pathway may request an additional unit from the *Addtional Unit Selections list.*

Master of Engineering (EN50) plus Master of Engineering Management (BN87) OR Master of Engineering (EN50) plus Master of Project Management (PM20)

If you are admitted to one of these pathways, once you successfully complete your Master of Engineering (EN50), you may progress to your second program.

Please refer to the relevant course site (<u>BN87</u> or <u>PM20</u>) for further information regarding your second degree and follow the study plan for your combined package.

Semesters

- Combined Masters Program Year
- EN50 Study Plan for BN87 Master of Engineering Management Graduates
- Electrical Engineering Major Unit Options List
- Mechanical Engineering Major Unit Options List
- Additional Unit Selections List

Code Title

Combined Masters Program - Year 2 To undertake EN50 Master of Engineering in Year 2 of your combined masters program, you will have completed BN87 Master of Engineering Management program in Year 1. Please follow the study plan below, including advanced standing, for your Year 2 EN50 program.

| EN50 Study Plan for BN87 Master of Engineering Management Graduates | | |
|--|------------------------------------|--|
| February | Entry | |
| Year 2, S | emester 1 | |
| ENN590 -1 | Project 1 | |
| Option unit - select from your major unit options list | | |
| Option unit - select from your major unit options list | | |
| Year 2, Semester 2 | | |
| ENN590 -2 | Project 2 | |
| ENN543 | Data Analytics and Optimisation | |

Option unit - select from your major unit options list

Mid Year Entry

Year 2, Semester 2

ENN590 -1 Project 1

ENN543 Data Analytics and Optimisation

Option unit - select from your major unit options list

Year 3, Semester 1

ENN590 -2 Project 2

Option unit - select from your major unit options list

Option unit - select from your major unit options list

Electrical Engineering Major Unit Options List

Select 36CP (3 units) from the Electrical Engineering Unit Options List:

(The units are grouped in areas to assist you in focusing your studies.)

POWER UNITS:

EGH440 Power Systems Analysis

EGH441 Power System Modelling

EGH448 Power Electronics

NETWORKS AND COMMUNICATIONS UNITS:

| EGH442 | RF Techniques and Applications | |
|---|--|--|
| EGH443 | Advanced Telecommunications | |
| EGH444 | Digital Signals and Image Processing | |
| ENN523 | Advanced Network Engineering | |
| ENN524 | Mobile Network Engineering | |
| CONTROL SYSTEMS UNITS | | |
| EGH445 | Modern Control | |
| EGH446 | Autonomous Systems | |
| ELECTRONICS UNITS | | |
| EGH449 | Advanced Electronics | |
| EGH456 | Embedded Systems | |
| Mechanical Engineering Major Unit Options List | | |
| Select 36CP (3 units) from the Mechanical Engineering Unit Options List | | |
| | | |
| EGH413 | Advanced Dynamics | |
| EGH413 EGH420 | Advanced Dynamics Mechanical Systems Design | |
| | , | |
| EGH420 | Mechanical Systems Design | |
| EGH420 EGH422 | Mechanical Systems Design Advanced Thermodynamics Asset and Facility | |



Master of Engineering and Maintenance Solar Thermal Systems - Heat ENN552 and Power Energy Optimised Buildings ENN553 and Communities Additional Unit Selections List International students on the BN87 + EN50 pathway may request an additional unit from the list below. Please contact the faculty sef.enquiry@qut.edu.au to arrange for your selection to be added to your study plan. Systems in Project PMN503 Management PMN608 Managing the Project MGN44 Self Leadership 2 Fundamentals of Business IFN515 Process Management



Handbook

| Year | 2018 |
|-------------------------------------|---|
| QUT code | EN55 |
| CRICOS | 096754G |
| Duration (full-time) | 2 years |
| Duration (part-time domestic) | 4 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$25,900 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$32,300 per year full-time (96 credit points) |
| Total credit points | 192 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Dhammika Jayalath; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirements

The minimum grade point average (GPA) requirements are based on QUT's 7.0 point scale where 4.0 is a Pass. Your bachelor degree must be completed and recognised by QUT.

Two (2) year program

Electrical major

- Three (3) year full time bachelor degree in electrical engineering or engineering technology (in electrical engineering with a minimum GPA of 4.0; or
- Four (4) year full time bachelor degree in any engineering discipline with a minimum GPA of 4.0.

Electrical and Management major

• Three (3) year full time bachelor degree in electrical engineering or engineering technology (in electrical engineering) with a minimum GPA of 4.0.

Mechanical major

- Three (3) year full time bachelor degree in mechanical engineering or engineering technology (in mechanical engineering) with a minimum GPA of 4.0; *or*
- Four (4) year full time bachelor degree in any engineering discipline with a minimum GPA. of 4.0.

Mechanical and Management major

Three (3) year full time bachelor degree in mechanical engineering or engineering technology (in mechanical engineering) with a minimum GPA of 4.0.

One and a half (1.5) year program

Electrical major

 Four (4) year full time bachelor degree in electrical engineering discipline with a minimum GPA of 4.0.

Electrical and Management major

• Four (4) year full time bachelor degree in electrical engineering discipline with a minimum GPA of 4.0.

Mechanical major

• Four (4) year full time bachelor degree in mechanical engineering discipline with a minimum GPA of 4.0.

Mechanical and Management major

• Four (4) year full time bachelor degree in mechanical engineering discipline with a minimum GPA of

4.0.

International Entry requirements

Academic entry requirements

The minimum grade point average (GPA) requirements are based on QUT's 7.0 point scale where 4.0 is a Pass. Your bachelor degree must be completed and recognised by QUT.

Two (2) year program

Electrical major

- Three (3) year full time bachelor degree in electrical engineering or engineering technology (in electrical engineering with a minimum GPA of 4.0; or
- Four (4) year full time bachelor degree in any engineering discipline with a minimum GPA of 4.0.

Electrical and Management major

• Three (3) year full time bachelor degree in electrical engineering or engineering technology (in electrical engineering) with a minimum GPA of 4.0.

Mechanical major

- Three (3) year full time bachelor degree in mechanical engineering or engineering technology (in mechanical engineering) with a minimum GPA of 4.0; or
- Four (4) year full time bachelor degree in any engineering discipline with a minimum GPA. of 4.0.

Mechanical and Management major

Three (3) year full time bachelor degree in mechanical engineering or engineering technology (in mechanical engineering) with a minimum GPA of 4.0.

One and a half (1.5) year

program

Electrical major

- Four (4) year full time bachelor degree in electrical engineering discipline with a minimum GPA of 4.0; or
- QUT's <u>Graduate Certificate in</u> <u>Communication for Engineering</u> with a minimum GPA of 4.0.

Electrical and Management major

- Four (4) year full time bachelor degree in electrical engineering discipline with a minimum GPA of 4.0; or
- QUT's <u>Graduate Certificate in</u> <u>Communication for Engineering</u> with a minimum GPA of 4.0.

Mechanical major



- Four (4) year full time bachelor degree in mechanical engineering discipline with a minimum GPA of 4.0.; or
- QUT's <u>Graduate Certificate in</u> <u>Communication for Engineering</u> with a minimum GPA of 4.0.

Mechanical and Management major

- Four (4) year full time bachelor degree in mechanical engineering discipline with a minimum GPA of 4.0.; or
- QUT's <u>Graduate Certificate in</u> <u>Communication for Engineering</u> with a minimum GPA of 4.0.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International Testing System) | English Language |
|---|------------------|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure

The Master of Professional Engineering offers four study areas (majors):

- Electrical Engineering
- Electrical and Management
- Mechanical Engineering
- Mechanical and Management

To graduate with a Master of Professional Engineering you are required to complete 192 credit points of course units consisting of:

84 credit points of core units, including advanced research skills and a capstone project that includes industry based research, two professional practice units, an advanced discipline unit and an engineering design unit. Plus 108 credit points of disipline units from your specialisation (major) to be selected from a list of options.

Option units provide added depth and breadth in your chosen discipline area, as such you should select an alternate unit if you have completed a similar or equivalent unit in your previous studies.

You are also required to undertake 60 days of approved work experience in the Engineering environment as part of your Work Integrated Learning.

International Course structure

The Master of Professional Engineering offers four study areas (majors):

- Electrical Engineering
- Electrical and Management
- Mechanical Engineering
- Mechanical and Management

To graduate with a Master of Professional Engineering you are required to complete 192 credit points of course units consisting of:

84 credit points of core units, including advanced research skills and and a capstone project that includes industry based research, two professional practice units, an advanced discipline unit and an engineering design unit. Plus 108 credit points of disipline units from your specialisation to be selected from a list of options.

Option units provide added depth and breadth in your chosen discipline area, as such you should select an alternate unit if you have completed a similar or equivalent unit in your previous studies.

You are also required to undertake 60 days of approved work experience in the Engineering environment as part of your Work Integrated Learning.

Sample Structure

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2
- Select 24CP (2 units) from the Engineering Management Unit Options List 1
- Select 24CP (2 units) from the Engineering Management Unit Options List 2
- Select 60CP (5 units) from the Electrical Strand Option List

| Code | Title |
|---------------------------|--|
| Year 1, Semest | er 1 |
| ENN545 | Design and Practice |
| Discipline Optio | n Unit |
| Discipline Optio | n Unit |
| Discipline Optio | n Unit |
| Year 1, Semester 2 | |
| | |
| ENN544 | Sustainable Practice in Engineering |
| ENN544 PMN610 | |
| | Engineering Project Management Principles |
| PMN610 | Engineering Project Management Principles Option Unit |
| PMN610 OR Discipline C | Engineering Project Management Principles Option Unit n Unit |

| Year 2, Semest | ter 1 |
|-----------------------------------|--------------------------------------|
| ENN541 | Research Methods for |
| | Engineers Project Management |
| PMN610 | Principles |
| OR Discipline C | Option Unit |
| ENN591-1 | Project 1 |
| Discipline Optic | on Unit |
| Year 2, Semest | ter 2 |
| ENN570 | Enterprise Resource Planning |
| ENN591-2 | Project 2 |
| Discipline Optic | on Unit |
| Discipline Optic | on Unit |
| Select 24CP (2 | |
| Engineering Ma List 1 | anagement Unit Options |
| ENN510 | Engineering Knowledge Management |
| ENN515 | Total Quality Management |
| ENN530 | Asset and Facility Management |
| Select 24CP (2 | units) from the |
| Engineering Ma List 2 | anagement Unit Options |
| | International Logistics |
| AMN430 | Management |
| ENN510 | Engineering Knowledge Management |
| ENN515 | Total Quality Management |
| ENN530 | Asset and Facility Management |
| MGN505 | Consulting and Change Management |
| MGN441 | Leadership and Executive Coaching |
| PMN601 | Projects and Performance |
| PMN504 | People and Projects |
| Select 60CP (5 Strand Option L | units) from the Electrical .ist |
| | rouped in areas to assist |
| | your studies. You can |
| | om across the areas. |
| POWER units: | |
| EGH440 | Power Systems Analysis |
| EGH441 | Power System Modelling |
| EGH448 | Power Electronics |
| NETWORKS A | ND COMMUNICATIONS |
| units: | PE Techniques and |

EGH442

EGH443

RF Techniques and

Telecommunications

Applications Advanced



| EGH444 | Digital Signals and Image Processing |
|-------------|---|
| ENN523 | Advanced Network Engineering |
| ENN524 | Mobile Network Engineering |
| CONTROL SYS | STEMS units: |
| EGH445 | Modern Control |
| EGH446 | Autonomous Systems |
| ELECTRONICS | S unit: |
| EGH449 | Advanced Electronics |
| EGH456 | Embedded Systems |
| | |

Semesters

- Year 1, Semester 1
- ٠ Year 1, Semester 2
- Year 2, Semester 1 • •
- Year 2, Semester 2 Select 24CP (2 units) from the ٠
- Engineering Management Unit Options List 1
- Select 24CP (2 units) from the • Engineering Management Unit **Options List 2**
- Select 60CP (5 units) from the ٠ Mechanical Strand Option List

| Code | Title |
|---|--|
| Year 1, Semeste | er 1 |
| ENN516 | Design of Machine Elements |
| Discipline Option | n Unit |
| Discipline Option | n Unit |
| Discipline Option | n Unit |
| Year 1, Semeste | er 2 |
| ENN544 | Sustainable Practice in Engineering |
| PMN610 | Project Management Principles |
| OR Discipline Op | otion Unit |
| Discipline Option | n Unit |
| Discipline Option | n Unit |
| Year 2, Semeste | er 1 |
| ENN541 | Research Methods for Engineers |
| PMN610 | Project Management Principles |
| OR Discipline Op | otion Unit |
| ENN591-1 | Project 1 |
| Discipline Option | n Unit |
| Year 2, Semeste | er 2 |
| ENN570 | Enterprise Resource Planning |
| ENN591-2 | Project 2 |
| Discipline Option | n Unit |
| Discipline Option | n Unit |
| Select 24CP (2 u Engineering Mar List 1 | units) from the nagement Unit Options |

| | Engineering |
|---------------------------|---|
| ENN510 | Knowledge |
| | Management |
| ENN515 | Total Quality |
| LININGTO | Management |
| ENN530 | Asset and Facility Management |
| Select 24CP (2 u | units) from the |
| Engineering Mar List 2 | nagement Unit Options |
| AMN430 | International Logistics Management |
| ENN510 | Engineering Knowledge Management |
| ENN515 | Total Quality Management |
| ENN530 | Asset and Facility Management |
| MGN505 | Consulting and Change Management |
| MGN441 | Leadership and Executive Coaching |
| PMN601 | Projects and Performance |
| PMN504 | People and Projects |
| Select 60CP (5 u | |
| Mechanical Stra | nd Option List |
| EGH413 | Advanced Dynamics |
| EGH414 | Stress Analysis |
| EGH420 | Mechanical Systems Design |
| EGH421 | Vibration and Control |
| EGH422 | Advanced Thermodynamics |
| EGH423 | Fluids Dynamics |
| ENN531 | Advanced Materials and Engineering Applications |
| ENN552 | Solar Thermal Systems - Heat and Power |
| ENN553 | Energy Optimised Buildings and Communities |
| | |

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2 •
- Select 108CP (9 units) from the range of specialist areas:

| Code | Title | | |
|------------------------|----------------------------|--|--|
| Year 1, Semester 1 | | | |
| ENN545 | ENN545 Design and Practice | | |
| Discipline Optic | on Unit | | |
| Discipline Option Unit | | | |
| Discipline Optic | n Unit | | |

| | Year 1, Semes | ster 2 |
|------------|-----------------|--|
| | ENN544 | Sustainable Practice in Engineering |
| | PMN610 | Project Management Principles |
| ity | OR Discipline | Option Unit |
| | Discipline Opti | on Unit |
| ptions | Discipline Opti | |
| | Year 2, Semes | ster 1 |
| gistics | ENN541 | Research Methods for Engineers |
| | PMN610 | Project Management Principles |
| | OR Discipline | Option Unit |
| | ENN590-1 | Project 1 |
| | Discipline Opti | on Unit |
| ity | Year 2, Semes | ster 2 |
| omont | ENN543 | Data Analytics and Optimisation |
| ement | ENN590-2 | Project 2 |
| hing | Discipline Opti | on Unit |
| | Discipline Opti | |
| | | (9 units) from across the |
| jects | range of speci | |
| | | grouped in areas to assist g your studies. You can |
| | | rom across the areas. |
| amics | POWER units: | |
| tems | EGH440 | Power Systems Analysis |
| ontrol | EGH441 | Power System Modelling |
| | EGH448 | Power Electronics |
| CS | NETWORKS A | AND COMMUNICATIONS |
| S | units: | |
| rials g | EGH442 | RF Techniques and Applications |
| and | EGH444 | Digital Signals and Image Processing |
| | EGH443 | Advanced Telecommunications |
| ed | ENN523 | Advanced Network Engineering |
| | ENN524 | Mobile Network Engineering |
| | CONTROL SY | STEMS units: |
| | EGH445 | Modern Control |
| | EGH446 | Autonomous Systems |
| across | ELECTRONIC | S units: |
| <u>s:</u> | EGH449 | Advanced Electronics |
| | EGH456 | Embedded Systems |
| | | |

. . .

-

Semesters

- Year 1, Semester 1
 Year 1, Semester 2
- •
- Year 2, Semester 1
- Year 2, Semester 2 •
- Select 36CP (3 units) from the



Mechanical Engineering Unit Options List 1

 Select 72CP (6 units) from the Mechanical Engineering Unit Options List 2

| Quala | T (0) |
|---|---|
| Code | Title |
| Year 1, Semeste | |
| ENN516 | Design of Machine Elements |
| Discipline Option | Unit |
| Discipline Option | Unit |
| Discipline Option | Unit |
| Year 1, Semeste | |
| ENN544 | Sustainable Practice in Engineering |
| PMN610 | Project Management Principles |
| OR Discipline Op | otion Unit |
| Discipline Option | Unit |
| Discipline Option | Unit |
| Year 2, Semeste | |
| | Research Methods for |
| ENN541 | Engineers |
| PMN610 | Project Management Principles |
| OR Discipline Op | otion Unit |
| ENN590-1 | Project 1 |
| Discipline Option | Unit |
| Year 2, Semeste | r 2 |
| ENN543 | Data Analytics and Optimisation |
| ENN590-2 | Project 2 |
| Discipline Option | - |
| Discipline Option | |
| Select 36CP (3 u | |
| EGH420 | Mechanical Systems Design |
| ENN531 | Advanced Materials and Engineering Applications |
| ENN552 | Solar Thermal Systems - Heat and Power |
| ENN553 | Energy Optimised Buildings and Communities |
| alternate years) | and ENN553 are run in |
| Select 72CP (6 ι Mechanical Engi List 2 | inits) from the neering Unit Options |
| EGH413 | Advanced Dynamics |
| EGH414 | Stress Analysis |
| EGH420 | Mechanical Systems Design |

| EGH422 | Advanced Thermodynamics |
|--------|---|
| EGH423 | Fluids Dynamics |
| ENN531 | Advanced Materials and Engineering Applications |
| ENN552 | Solar Thermal Systems - Heat and Power |
| ENN553 | Energy Optimised Buildings and Communities |

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
 Year 2, Semester 1
- Select 24CP (2 units) from the Engineering Management Unit **Options List 1**
- Select 24CP (2 units) from the Engineering Management Unit Options List 2
- Select 12CP (1 unit) from the **Electrical Strand Option List**

| Code | THE |
|--|---|
| Code | Title |
| Year 1, Semest | |
| ENN545 | Design and Practice |
| PMN610 | Project Management Principles |
| OR Discipline C | Option Unit |
| Discipline Optio | n Unit |
| Discipline Optio | n Unit |
| Year 1, Semest | er 2 |
| ENN544 | Sustainable Practice in Engineering |
| ENN570 | Enterprise Resource Planning |
| ENN541 | Research Methods for Engineers |
| ENN591-1 | Project 1 |
| Year 2, Semest | er 1 |
| PMN610 | Project Management Principles |
| OR Discipline C | Option Unit |
| Discipline Optio | n Unit |
| Discipline Optio | n Unit |
| ENN591-2 | Project 2 |
| Select 24CP (2 Engineering Ma List 1 | units) from the nagement Unit Options |
| ENN510 | Engineering Knowledge Management |
| ENN515 | Total Quality Management |
| ENN530 | Asset and Facility Management |
| Select 24CP (2 Engineering Ma List 2 | units) from the inagement Unit Options |

| AMN430 | International Logistics Management |
|--|--|
| ENN510 | Engineering Knowledge Management |
| ENN515 | Total Quality Management |
| ENN530 | Asset and Facility Management |
| MGN505 | Consulting and Change Management |
| MGN441 | Leadership and Executive Coaching |
| PMN601 | Projects and Performance |
| PMN504 | People and Projects |
| Select 12CP Strand Optior | (1 unit) from the Electrical n List |
| | ng your studies. You can from across the areas. |
| POWER units | S: |
| | s: Power Systems Analysis |
| POWER units | Power Systems |
| POWER units EGH440 | Power Systems Analysis Power System |
| POWER units EGH440 EGH441 EGH448 | Power Systems Analysis Power System Modelling |
| POWER units EGH440 EGH441 EGH448 NETWORKS | Power Systems Analysis Power System Modelling Power Electronics |
| POWER units EGH440 EGH441 EGH448 NETWORKS units: | Power Systems Analysis Power System Modelling Power Electronics AND COMMUNICATIONS RF Techniques and |
| POWER units EGH440 EGH441 EGH448 NETWORKS units: EGH442 | Power Systems Analysis Power System Modelling Power Electronics AND COMMUNICATIONS RF Techniques and Applications Advanced |
| POWER units EGH440 EGH441 EGH448 NETWORKS units: EGH442 EGH443 | Power Systems Analysis Power System Modelling Power Electronics AND COMMUNICATIONS RF Techniques and Applications Advanced Telecommunications Digital Signals and Image Processing Advanced Network Engineering |
| POWER units EGH440 EGH441 EGH448 NETWORKS units: EGH442 EGH443 EGH444 | Power Systems Analysis Power System Modelling Power Electronics AND COMMUNICATIONS RF Techniques and Applications Advanced Telecommunications Digital Signals and Image Processing Advanced Network |
| POWER units EGH440 EGH441 EGH448 NETWORKS units: EGH442 EGH443 EGH444 ENN523 ENN524 | Power Systems Analysis Power System Modelling Power Electronics AVUCOMMUNICATIONS RF Techniques and Applications Advanced Telecommunications Digital Signals and Image Processing Advanced Network Engineering Mobile Network |
| POWER units EGH440 EGH441 EGH448 NETWORKS units: EGH442 EGH443 EGH444 ENN523 ENN524 | Power Systems AnalysisPower System ModellingPower ElectronicsVower ElectronicsArrowArrowArrowArrowDigital Signals and Image ProcessingAdvanced Network EngineeringMobile Network Engineering |
| POWER units EGH440 EGH441 EGH448 NETWORKS units: EGH442 EGH443 EGH444 ENN523 ENN524 CONTROL S | Power Systems Analysis Power System Modelling Power Electronics ADCOMMUNICATIONS RF Techniques and Applications Advanced Telecommunications Digital Signals and Image Processing Advanced Network Engineering Mobile Network Engineering |
| POWER units EGH440 EGH441 EGH448 NETWORKS units: EGH442 EGH443 EGH444 ENN523 ENN524 CONTROL S EGH445 | Power Systems AnalysisPower System ModellingPower ElectronicsVower Electronics |
| POWER units EGH440 EGH441 EGH448 NETWORKS units: EGH442 EGH443 EGH444 ENN523 ENN524 CONTROL S EGH445 EGH446 | Power Systems AnalysisPower System ModellingPower ElectronicsVower Electronics |

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
 Year 2, Semester 1
- Select 24CP (2 units) from the Engineering Management Unit Options List 1
- Select 24CP (2 units) from the **Engineering Management Unit** Options List 2
- Select 12CP (1 unit) from the Mechanical Strand Option List

QUI

Code Title Year 1, Semester 1

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

Vibration and Control

EGH421

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=EN55&courseID=33650. CRICOS No.00213J

| Master OFFIC | Master of Professional Engineerin | | |
|---|--|--|--|
| ENN516 | Design of Machine Elements | | |
| PMN610 | Project Management Principles | | |
| OR Discipline Op | otion Unit | | |
| Discipline Option | i Unit | | |
| Discipline Option | i Unit | | |
| Year 1, Semeste | r 2 | | |
| ENN541 | Research Methods for Engineers | | |
| ENN544 | Sustainable Practice in Engineering | | |
| ENN570 | Enterprise Resource Planning | | |
| ENN591-1 | Project 1 | | |
| Year 2, Semeste | r 1 | | |
| PMN610 | Project Management Principles | | |
| OR Discipline Op | | | |
| Discipline Option | | | |
| Discipline Option | Unit | | |
| ENN591-2 | Project 2 | | |
| Select 24CP (2 units) from the Engineering Management Unit Options List 1 | | | |
| ENN510 | Engineering Knowledge Management | | |
| ENN515 | Total Quality Management | | |
| ENN530 | Asset and Facility Management | | |
| Select 24CP (2 u | | | |
| Engineering Mar List 2 | nagement Unit Options | | |
| AMN430 | International Logistics Management | | |
| ENN510 | Engineering Knowledge Management | | |
| ENN515 | Total Quality Management | | |
| ENN530 | Asset and Facility Management | | |
| MGN505 | Consulting and Change Management | | |
| MGN441 | Leadership and Executive Coaching | | |
| PMN601 | Projects and Performance | | |
| PMN504 | People and Projects | | |
| Select 12CP (1 u Mechanical Strar | | | |
| EGH413 | Advanced Dynamics | | |
| EGH414 | Stress Analysis | | |
| EGH420 | Mechanical Systems Design | | |
| EGH421 | Vibration and Control | | |

| EGH422 | Advanced Thermodynamics |
|--------|---|
| EGH423 | Fluids Dynamics |
| ENN531 | Advanced Materials and Engineering Applications |
| ENN552 | Solar Thermal Systems - Heat and Power |
| ENN553 | Energy Optimised Buildings and Communities |

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
 Year 2, Semester 1
- Select 60CP (5 units) from across the range of specialist areas:

| Code | Title | |
|--|-------------------------------------|--|
| Code | Title | |
| Year 1, Semest | | |
| ENN545 | Design and Practice | |
| PMN610 | Project Management Principles | |
| OR Discipline C | Option Unit | |
| Discipline Optio | n Unit | |
| Discipline Optio | n Unit | |
| Year 1, Semest | er 2 | |
| ENN541 | Research Methods for Engineers | |
| ENN543 | Data Analytics and Optimisation | |
| ENN544 | Sustainable Practice in Engineering | |
| ENN590-1 | Project 1 | |
| Year 2, Semest | er 1 | |
| PMN610 | Project Management Principles | |
| OR Discipline C | Option Unit | |
| Discipline Optio | n Unit | |
| Discipline Optio | n Unit | |
| ENN590-2 | Project 2 | |
| Select 60CP (5 | units) from across the | |
| range of specia | | |
| The units are grouped in areas to assist you in focusing your studies. You can choose units from across the areas. | | |
| POWER units: | | |
| EGH440 | Power Systems Analysis | |
| EGH441 | Power System Modelling | |
| EGH448 | Power Electronics | |
| NETWORKS AND COMMUNICATIONS units: | | |
| EGH442 | RF Techniques and Applications | |
| EGH444 | Digital Signals and | |

| | Image Processing | |
|------------------------|---------------------------------|--|
| EGH443 | Advanced Telecommunications | |
| ENN523 | Advanced Network Engineering | |
| ENN524 | Mobile Network Engineering | |
| CONTROL SYSTEMS units: | | |
| EGH445 | Modern Control | |
| EGH446 | Autonomous Systems | |
| ELECTRONICS units: | | |
| EGH449 | Advanced Electronics | |
| EGH456 | Embedded Systems | |

Semesters

- Year 1, Semester 1
 Year 1, Semester 2

- Year 2, Semester 1
 Select 36CP (3 units) from the Mechanical Engineering Unit Options List 1
- Select 24CP (2 units) from the Mechanical Engineering Unit **Options List 2**

| Code | Title | |
|---|---|--|
| Year 1, Semester 1 | | |
| ENN516 | Design of Machine Elements | |
| PMN610 | Project Management Principles | |
| OR Discipline Option Unit | | |
| Discipline Option Unit | | |
| Discipline Option | ı Unit | |
| Year 1, Semeste | r 2 | |
| ENN541 | Research Methods for Engineers | |
| ENN543 | Data Analytics and Optimisation | |
| ENN544 | Sustainable Practice in Engineering | |
| ENN590-1 | Project 1 | |
| Year 2, Semeste | r 1 | |
| PMN610 | Project Management Principles | |
| OR Discipline Option Unit | | |
| Discipline Option Unit | | |
| Discipline Option | i Unit | |
| ENN590-2 | Project 2 | |
| Select 36CP (3 units) from the Mechanical Engineering Unit Options List 1 | | |
| EGH420 | Mechanical Systems Design | |
| ENN531 | Advanced Materials and Engineering Applications | |
| ENN552 | Solar Thermal Systems - Heat and | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit

https://www.student.qut.edu.au/enrolment/courses/course?courseCode=EN55&courseID=33650. CRICOS No.00213J

QUI

| | Power | |
|---|---|--|
| ENN553 | Energy Optimised Buildings and Communities | |
| (Note: ENN552 a alternate years) | and ENN553 are run in | |
| Select 24CP (2 units) from the Mechanical Engineering Unit Options List 2 | | |
| EGH413 | Advanced Dynamics | |
| EGH414 | Stress Analysis | |
| EGH420 | Mechanical Systems Design | |
| EGH421 | Vibration and Control | |
| EGH422 | Advanced Thermodynamics | |
| EGH423 | Fluids Dynamics | |
| ENN531 | Advanced Materials and Engineering Applications | |
| ENN552 | Solar Thermal Systems - Heat and Power | |
| ENN553 | Energy Optimised Buildings and Communities | |



QUT

Master of Information Technology

Handbook

| | - |
|-------------------------------------|--|
| Year | 2018 |
| QUT code | IN20 |
| CRICOS | 083059E |
| Duration (full-time) | 2 years |
| Duration (part-time domestic) | 4 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$20,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$28,700 per year full-time (96 credit points) |
| Total credit points | 192 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Hasmukh Morarji; Tel: 07 3138 8822; Email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirements

A completed recognised bachelor degree in any discipline with a minimum grade point average (GPA) score of 4.0 (on QUT's 7 point scale).

International Entry requirements

Academic entry requirements

A completed recognised bachelor degree in *any discipline* with a minimum grade point average (GPA) score of 4.0 (on QUT's 7 point scale).

Applicants with a completed recognised bachelor degree in information technology with a minimum grade point average (GPA) score of 4.0 (on QUT's 7 point scale) may be eligible for entry into IN21 Master of Information Technology (Graduate Entry).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

If you have an IELTS score of 6 (with Reading and Writing no less than 5.5) and (Listening and Speaking no less than 5)(or accepted equivalent)you may be considered for the Graduate Certificate in Communication for Information Technology pathway.

Course Overview

Graduates of the Master of IT degree will have the specialist knowledge and skills required for senior IT-related professional positions (both technical and managerial). The range of majors offered within the degree opens opportunities for students across the IT sector.

Students who graduate from this degree will have the ability to demonstrate advanced knowledge, based on research practices, in at least one IT discipline. They will undertake a significant research-based project that allows them to constructively apply the analytical skills they develop within an IT problem domain. The course will provide students with the ability to formulate best practice IT strategies and solutions and during this process create new IT discipline knowledge.

The degree aims to prepare students for work in a specialist IT area through a program of study that balances theoretical content, project-based experiences and industry-oriented perspectives.

Core Units

Students must complete core units in Research Based Practice, Project Management and a major Project or 2 small Projects on the approval of their Course Coordinator.

Majors

Students may select a major of 48 credit points from the following disciplines;

* Data Science

The data science major provides you with the knowledge and skills to extract information from large, complex and disparate data sets, using leading edge algorithms and tools.

* Enterprise Systems

Enterprise systems are engineered information systems that consist of applications and associated information, forming the fundamental structure of organisational processes in most large organisations. Enterprise systems provide comprehensive administrative systems and help to automate and streamline business processes.

* Security

The Security major provides you with the skills and knowledge appropriate for a information security professional. You will develop skills in risk management security policies and be aware of the technocal security mechanisms and issues.

* Computer Science

The computer science major extends your understanding of computer programming beyond being a mere user of programming language to an appreciation of their design and implementation.

* Business Process Management

The Business Process Management Major will provide graduates with complementary skills and knowledge to create and align information systems to effectively support business and enable business strategy.

* Networks



a university for the **real** world[®]



Master of Information Technology

The Networks major provides you with the practical skills and theoretical knowledge required by a network administrator. You will gain experience with designing, implementing and maintaining network systems for a wide range of organisations.

* Human Computer Interaction

The HCI major develops the advanced knowledge & skills in human-centred design activities involving emerging technologies in order to create new forms of human-computer interaction.

* Information Management

The Information Management major provides you with the skills and knowledge to find employment in the information management industry. You will gain awareness of the activities in which information management professionals are engaged, in various organisational contexts.

* No Major

Students may select any 4 Advanced level units

Masters Strand Options

Students must complete 72 credit points from the Transition/Advanced Unit Options

Course Completion Rules

Students should meet the following requirements before they are able to complete the Masters program:

For students with an undergraduate degree in an IT-related field wishing to complete the 2 year MIT:

• Students are required to complete 192 credit points of units.

• Students are required to complete the specified core units.

• Students wishing to specialise must complete the specific unit requirements for a major.

• Students wishing to complete their postgraduate studies without a single area of specialisation must satisfy the unit requirements for graduation with no major.

• Students may be allowed to take up to 72 credit points of electives from the list of approved elective units provided.

Entry Requirements

A completed recognised Level 7 Bachelor Degree in any discipline with a minimum GPA of 4 (on a 7 point scale).

IELTS overall band score of 6.5 with no sub-band below 6.0, or equivalent.

Students who have completed a recognised Level 7 Bachelor Degree in the field of Information Technology and are eligible to enter IN21 (graduate entry) MUST indicate 2 year entry option at point of application.

Sample Structure Important Course Information

 Students without Information Technology

discipline background If you have an undergraduate degree in a field other than IT you will need to select units from IN20 Option Strands - Master Transition Units in Information Technology (IN20STR-TRANS)

 Students with Information Technology

discipline background If you are an IT discipline graduate, please contact the Course Coordinator for additional options.

If you are advised to do the IN20 Option Strands - Advanced Masters Units in Information Technology (IN20-ADVMUNITS), your course structure will be different to the structure below.

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1
- Year 2, Semester 2

Code

| Year 1, Semester 1 | |
|--|------------------------|
| Note: If you are an IT discipline graduate, please see your Course Coordinator for additional options. | |
| IFN500 | Design Thinking for IT |

Title

| IFN501 | Programming Fundamentals |
|--|---------------------------------|
| IFN700 | Project Management |
| Transition Option Unit 1 (Select pre- major unit here if offered) | |
| Year 1, Semester 2 | |
| IFN502 | IT Innovation and Disruption |

| | Disruption |
|--------|-------------------------------------|
| IFN503 | Fundamentals of Computer Systems |
| IFN600 | Understanding Research |

Transition Option Unit 2 (Select premajor unit here if offered)

Year 2, Semester 1

| · · | |
|---|--------------------------|
| IFN701 | Project 1 |
| Advanced Master Unit Option List/Majo Core 2 | |
| Advanced Maste | r Unit Option List/Major |

Core 2

Year 2, Semester 2

IFN702 Project 2

Advanced Master Unit Option List (if undertaking 'No Major' option) OR / Major Option 1

Advanced Master Unit Option List (if undertaking 'No Major' option) OR / Major Option 2



Master of Information Technology - Graduate Entry

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | IN21 |
| CRICOS | 083059E |
| Duration (full-time) | 1.5 years |
| Duration (part-time domestic) | 3 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$20,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$28,700 per year full-time (96 credit points) |
| Total credit points | 144 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Hasmukh Morarji; Tel: 07 3138 8822; Email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirements

A completed recognised bachelor degree in information technology with a minimum grade point average (GPA) score of 4.0 (on QUT's 7 point scale).

International Entry requirements

Academic entry requirements

A completed recognised bachelor degree in information technology with a minimum grade point average (GPA) score of 4.0 (on QUT's 7 point scale).

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Entry Requirements

A completed recognised Bachelor Degree in the discipline of Information Technology with a minimum GPA of 4 (on a 7 point scale).

IELTS overall band score of 6.5 with no sub-band below 6.0, or equivalent.

Course Overview

Graduates of the Master of IT degree will have the specialist knowledge and skills required for senior IT-related professional positions (both technical and managerial). The range of majors offered within the degree opens opportunities for students across the IT sector.

Students who graduate from this degree will have the ability to demonstrate advanced knowledge, based on research practices, in at least one IT discipline. They will undertake a significant research-based project that allows them to constructively apply the analytical skills they develop within an IT problem domain. The course will provide students with the ability to formulate best practice IT strategies and solutions and during this process create new IT discipline knowledge.

The degree aims to prepare students for

work in a specialist IT area through a program of study that balances theoretical content, project-based experiences and industry-oriented perspectives.

Core Units

Students must complete core units in Research Based Practice, Project Management and a major Project or 2 small Projects on the approval of their Course Coordinator.

Majors

Students may select a major of 48 credit points from the following disciplines;

- * Enterprise Systems
- * Security
- * Computer Science
- * Data Science
- * Business Process Management
- * Networks
- * Human Computer Interaction
- * Information Management
- * No Major

See Major Structure Lists for overviews

Masters Strand Options

Students must complete 24 credit points of Advanced Unit Options from the Options Strand

Course Completion Rules

Students should meet the following requirements before they are able to complete the IN21 program:

- Students are required to complete 144 credit points of units.
- Students are required to complete the specified core units.

• Students wishing to specialise must complete the specific unit requirements for a major.

• Students wishing to complete their postgraduate studies without a single area of specialisation must satisfy the unit requirements for graduation with no major.

• Students may be allowed to take up to two units of electives from the list of approved elective units provided.

Sample Structure

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1

| Code | Title |
|--------------------|-------|
| Year 1, Semester 1 | |
| Major Core Unit | |



Master of Information Technology - Graduate Entry

| Major Core Unit/ Major Option Unit | | |
|--|---------------------------|--|
| IFN600 | Understanding Research | |
| Advanced Unit Option Or IFN700 Project Management | | |
| Year 1, Semester 2 | | |
| Major Core Unit/ Major Option Unit | | |
| IFN700 | Project Management | |
| IFN701 | Project 1 | |
| Year 2, Semester 1 | | |
| Advanced Unit Option | | |
| Major Core Unit/ Major Option Unit | | |
| IFN702 | Project 2 | |
| | | |



QUT

Master of Information Science

Handbook

| Year | 2018 |
|-------------------------------------|---|
| QUT code | IN22 |
| CRICOS | 083058F |
| Duration (full-time) | 2 years |
| Duration (part-time domestic) | 4 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$20,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$28,700 per year full-time (96 credit points) |
| Total credit points | 192 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Ian Stoodley; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |

Domestic Entry requirements

A completed recognised Bachelor Degree in any discipline with a minimum GPA of 4 (on a 7 point scale).

International Entry requirements

A completed recognised Bachelor Degree in any discipline with a minimum GPA of 4 (on a 7 point scale).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Overview

This degree prepares you for entry into the dynamic and exiting world of the information industry. It has been designed to provide a rich and stimulating learning environment that helps you to develop the skills, knowledge and attitudes needed by contemporary information professionals. You will acquire the knowledge and expertise required to design, plan, develop, manage and evaluate information services to meet the information needs of clients. A hands-on and real world based curriculum gives you the opportunity to explore a wide range of areas within the information field and gain deep understanding within your chosen speciality such as information management or library and information practice.

You will have the opportunity to interact with peers, lecturers and the information sector through social technologies and immersive learning environments. Designed to suit your busy lifestyle the degree can be taken online or face-toface or a mix of both – the choice is yours. This course will position you for a challenging and rewarding career in today's information-rich and technologydriven age.

Entry Requirements

Domestic students: A completed recognised Level 7 Bachelor Degree in any discipline with a minimum GPA of 4 (on a 7 point scale). International students: A completed recognised Level 7 Bachelor Degree in any discipline with a minimum GPA of 4 (on a 7 point scale). IELTS overall band score of 6.5 with no sub-band below 6.0, or equivalent.

Course Completion Rules

Students should meet the following requirements before they are able to complete the IN22 program:

• Students are required to complete 192 credit points of units.

• Students are required to complete 60cp of core units comprising a research methods (12cp) unit and 48cp of research project work;

Students are required to complete 96cp major comprising 8, 12cp units; and
Students are required to complete 36cp of elective units including suitable units from the MBPM and the MIT

Why Study Information Science ?

Through this degree you will develop a broad understanding of the information science discipline with strong skills in a major selected from Information Management, or Library and Information Practice. The degree will position you to become a professional in a rapidly changing, technology driven and information rich world, having the communication, interpersonal skills and teamwork skills needed to work effectively in a global environment.

Professional Membership

Graduate eligible for membership of the Australian Library and Information Association (ALIA)

Flexible Delivery

This degree is designed to suit your busy lifestyle. Classes run in the evenings and many of the core units can be taken online, face-to-face or a mix of both - the choice is yours.

Domestic Course structure

This degree prepares you for entry into the dynamic and exiting world of the information industry. It has been designed to provide a rich and stimulating learning environment that helps you to develop the skills, knowledge and attitudes needed by contemporary information professionals. You will acquire the knowledge and expertise required to design, plan, develop, manage and evaluate



Master of Information Science

information services to meet the information needs of clients. A hands-on and real world based curriculum gives you the opportunity to explore a wide range of areas within the information field and gain deep understanding within your chosen speciality such as information management or library and information practice.

International Course structure

This degree prepares you for entry into the dynamic and exiting world of the information industry. It has been designed to provide a rich and stimulating learning environment that helps you to develop the skills, knowledge and attitudes needed by contemporary information professionals. You will acquire the knowledge and expertise required to design, plan, develop, manage and evaluate information services to meet the information needs of clients. A hands-on and real world based curriculum gives you the opportunity to explore a wide range of areas within the information field and gain deep understanding within your chosen speciality such as information management or library and information practice.

| Year | 2018 |
|-------------------------------------|---|
| QUT code | IN22 |
| CRICOS | 083058F |
| Duration (full-time) | 2 years |
| Duration (part-time domestic) | 4 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$20,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$28,700 per year full-time (96 credit points) |
| Total credit points | 192 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Ian Stoodley; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirement

A completed recognised bachelor degree in any discipline with a minimum grade point average (GPA) score of 4.0 (on QUT's 7 point scale).

International Entry requirements Academic entry requirement

A completed recognised bachelor degree in any discipline with a minimum grade point average (GPA) score of 4.0 (on QUT's 7 point scale).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Planning your enrolment and key dates

Enrolment is undertaken on your Study Plan in QUT Virtual. Read the information under the Course Structure tab, note your important enrolment key dates, then access your Study Plan to enrol. More information about Study Plans.

Overview

The Graduate Certificate in Insolvency and Restructuring:

• Will boost your career by completing this specialised qualification in insolvency and restructuring.

• Provide you with in depth knowledge to understand and manage insolvency and restructuring issues

• Is delivered by professors and practitioners who have extensive experience in insolvency and restructuring. They will share their personal expertise to benefit your career

• Is available online, Australia-wide, with optional workshops in selected major capital cities

Aim

The course aims to provide suitably qualified graduates with a unique and specialist course responding directly to the needs of Australian and international practitioners in insolvency, restructuring and turnaround solutions. Comprising three core units and the choice of one elective, the course material will be presented in mostly modular format and will be developed according to the contemporary and up-to-the-minute needs of the industry. The course will deal with corporate and personal insolvency, placing an emphasis on corporate insolvency. It will examine turnaround and restructuring options and further, will focus on the protocols in ethics and professional responsibility to be cultivated in the insolvency practitioner. The course will also work to develop a suitable sense of commercial judgement in the emerging insolvency professional.

Entry Requirements

Domestic students

A recognised Bachelor degree or higher in law, accounting, economics or finance.

International Students

The course is not available to international student visa holders. It is available in an external mode only.

English Language Requirements

IELTS Overall 6.5 (with no sub-score less than 6.0) or equivalent accepted by QUT.

2015 Course Structure

Students admitting in 2015 semester one or two will complete one unit only per semester:

Semester 1: LWN805 Restructuring, Professionalism and Ethics in Insolvency Practice

5TP4: LWN803 Cross Border Insolvency or

Semester 2: LWN804 Regulatory Issues Impacting Insolvency Practice

Course Structure

The course consists of three core units and one elective. LWN801 Insolvency Law and Professional Practice 1; LWN802 Insolvency Law and Professional Practice 2; and LWN805 Restructuring, Professionalism



Select 1 unit from the Information

Science Options List

and Ethics in Insolvency Practice

Choose one elective unit: LWN803 Cross-Border Insolvency or LWN804 Regulatory Issues Impacting Insolvency Practice

Further study options

This qualification articulates into the Master of Laws (for those with a Law Degree) or the Master of Applied Law (for non-law profesionals) for additional career development. On completion of this Graduate Certificate, you can apply for four units advanced standing toward either of these Masters Programs.

More Information

School of Law Phone: 3138 2839 email: lawandjustice@qut.edu.au

Sample Structure

Semesters

- Year 1, Semester 1
- Year 1, Semester 2
 Year 2 Semester 1
- Year 2, Semester 1
 Year 2, Semester 2

| Code | Title | |
|---|---|--|
| Year 1, Semeste | er 1 | |
| IFN500 | Design Thinking for IT | |
| OR | | |
| IFN502 | IT Innovation and Disruption | |
| IFN610 | Management Issues for Information Professionals | |
| IFN611 | Information Retrieval | |
| IFN612 | Emerging Technologies for Information Practice | |
| Year 1, Semeste | r 2 | |
| IFN615 | Information Management | |
| IFN616 | Online Information Services | |
| IFN617 | Managing and Organising Collections | |
| IFN700 | Project Management | |
| Year 2, Semeste | er 1 | |
| IFN600 | Understanding Research | |
| IFN701 | Project 1 | |
| Select 1 unit from the Information Science Options List | | |
| Year 2, Semester 2 | | |
| IFN702 | Project 2 | |
| Select 1 unit from the Information Science Options List | | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=IN22&courseID=32795. CRICOS No.00213J



| Year | 2018 |
|-------------------------------------|---|
| QUT code | IN22 |
| CRICOS | 083058F |
| Duration (full-time) | 2 years |
| Duration (part-time domestic) | 4 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$20,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$28,700 per year full-time (96 credit points) |
| Total credit points | 192 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Ian Stoodley; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirement

A completed recognised bachelor degree in any discipline with a minimum grade point average (GPA) score of 4.0 (on QUT's 7 point scale).

International Entry requirements Academic entry requirement

A completed recognised bachelor degree in any discipline with a minimum grade point average (GPA) score of 4.0 (on QUT's 7 point scale).

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Overview

Librarians empower people by connecting them with information. Libraries provide access to information and technology, as well as programs and services that support business, government and education. They support individuals' lifelong learning and leisure pursuits and assist people to develop literacies.

This degree will prepare you for a rewarding career as a librarian. It has been designed to provide a dynamic, rich and stimulating learning experience that helps you to develop the skills, knowledge and attitudes needed by contemporary information professionals. You will learn how to design, plan, implement, manage and evaluate information services to meet the needs of clients. You will also learn about the management, curation and preservation of information artifacts, as well as the applications of emerging technologies in information practice. In addition to core skills and knowledge related to information practice, you will develop the communication, interpersonal and teamwork skills needed to work effectively in a global environment.

A hands-on, real world based curriculum gives you the opportunity to explore the information professions broadly and to

gain a deep understanding of library and information practice.

Flexible Learning

This degree is designed to suit your busy lifestyle. Our flexible approach to teaching allows you to study online or face-to-face, or a mix of both. A blend of on campus classes, online classes, and class recordings provide you with options for how, when and where you engage with unit material.

Why choose this course?

Are you looking for a career in librarianship or the information professions more broadly? In this rapidly changing, technology driven and information rich age, careers in the information professions are varied and exciting. In this course, you will explore the interrelationships between information, technology and people and develop specialist skills and knowledge that will equip you for a variety of roles in the information professions.

Our innovative, flexible approaches to teaching and learning allow you to balance study with your other commitments.

Real world learning

The degree aims to prepare students for work as information professional through a program of study that balances theoretical content, project based experiences and industry orientated perspectives.

During your studies, you will:
Undertake authentic learning and assessment activities that set the key learning activities within actual libraries and information centres or interacting directly with industry practitioners.
Hear from invited speakers who present

their own employment situation as an example of the topic or theme covered in the class.

• Explore real world or research inspired problems within units.

Undertake industry based research projects, undertaken with both an industry supervisor and an academic supervisor.
Participate in the QUT Career Mentoring Scheme where students are partnered with a current industry practitioner for 6 months.

Career outcomes

As a graduate of this course, you will be ready to take on a career as a librarian, specialist librarian, database manager,

Master of Information Science (Library and Information Practice)

web content manager, information architect, cataloguer, knowledge manager, or intranet manager.

Employment opportunities are extensive. Your ALIA accredited qualification can take you into a range of libraries, including

- academic libraries
- public libraries
- state and national libraries
- · special libraries and information centres such as
- o law libraries
- o health and medical centres
- o music libraries.

Opportunities also exist beyond traditional library contexts, including careers in

- knowledge management
- records management
- web and intranet development
- · research, development and policy.

Professional recognition

As a graduate, you will be eligible for membership of the Australian Library and Information Association (ALIA).

Research pathways

This Masters degree provides a pathway to a research degree (Research Masters, Professional Doctorate or PhD). Students who successfully complete IFN600 Research Based Practice and a 48 credit point research project are encouraged to apply for enrolment in a doctoral program. IN22 provides direct pathways for entry to a PhD program as well as to the Faculty's Professional Doctorate, Doctor of Information Technology.

Sample Structure **Semesters**

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1 Year 2, Semester 2

| Code | Title |
|--------------------|---|
| Year 1, Semeste | r 1 |
| IFN610 | Management Issues for Information Professionals |
| IFN611 | Information Retrieval |
| IFN612 | Emerging Technologies for Information Practice |
| IFN620 | Professional Practice |
| Year 1, Semester 2 | |
| IFN614 | Information Programs |
| IFN615 | Information Management |

| IFN616 | Online Information Services | |
|--|--|--|
| IFN617 | Managing and Organising Collections | |
| Year 2, Semeste | er 1 | |
| IFN600 | Understanding Research | |
| IFN701 | Project 1 | |
| Select 1 unit from the Information Science Options List | | |
| Year 2, Semester 2 | | |
| IFN702 | Project 2 | |
| Select 1 unit from the Information Science Options List | | |
| Select 1 unit from the Information Science Options List | | |



| Year | 2018 |
|-------------------------------------|--|
| QUT code | IN23 |
| CRICOS | 062622A |
| Duration (full-time) | 1.5 years |
| Duration (part-time domestic) | 3 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$20,700 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$28,800 per year full-time (96 credit points) |
| Total credit points | 144 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Chun Ouyang; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirements

A completed recognised bachelor degree (or higher) in business or information technology with a minimum grade point average (GPA) score of 4.0 (on QUT's 7 point scale); or

A completed recognised bachelor degree (or higher) in any discipline with a minimum grade point average (GPA) score of 4.0 (on QUT's 7 point scale) and five (5) years industry experience in business, information technology or business process management.

International Entry requirements

Academic entry requirements A completed recognised bachelor degree (or higher) in business or information technology with a minimum grade point average (GPA) score of 4.0 (on QUT's 7 point scale); or

A completed recognised bachelor degree (or higher) in any discipline with a minimum grade point average (GPA) score of 4.0 (on QUT's 7 point scale) and five (5) years industry experience in business, information technology or business process management.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

The Master of Business Process Management will provide graduates with the skills and knowledge to create and align information systems to effectively support business and enable business strategy. The program examines business-IT alignment issues through appropriate theory and skill development, and provides career enhancement opportunities into senior management and governance roles. Students will study specialist units in Business Process Management specialisation and may undertake additional study in the areas of corporate systems, IT professional services, enterprise architecture and systems, and information and knowledge management.

Course Structure

To be eligible for the Master of Business Process Management (IN23): • Students are required to complete 144 credit points of units.

Students are required to complete the specified core units (120cp) which includes 48cp in specialist Business Process Management units
Students must also complete two units (24cp) of electives from the list of approved elective units provided.

Domestic Course structure

The Master of Business Process Management provides graduates with the skills and knowledge to create and align information systems to effectively support business and enable business strategy. The program examines business-IT alignment issues through appropriate theory and skill development, and provides career enhancement opportunities into senior management and governance roles.

Students will study specialist units in Business Process Management specialisation and may undertake additional study in the areas of corporate systems, IT professional services, enterprise architecture and systems, and information and knowledge management.

Course completion rules

- Students are required to complete 144 credit points of units.
- Students are required to complete the specified core units (120cp) which includes 48cp in specialist Business Process Management units.
- Students must also complete two units (24cp) of electives from the list of approved elective units provided.
 NB: If you have no BPM Background, you should complete IFN515 in your first semester

International Course structure

The Master of Business Process Management provides graduates with the skills and knowledge to create and align information systems to effectively support business and enable business strategy. The program examines business-IT alignment issues through appropriate theory and skill development, and provides career enhancement

Master of Business Process Management

opportunities into senior management and governance roles.

Students will study specialist units in **Business Process Management** specialisation and may undertake additional study in the areas of corporate systems, IT professional services, enterprise architecture and systems, and information and knowledge management.

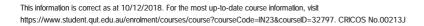
Course completion rules

- Students are required to complete 144 credit points of units.
- Students are required to complete the specified core units (120cp) which includes 48cp in specialist Business Process Management units
- · Students must also complete two units (24cp) of electives from the list of approved elective units provided. NB: Students are expected to have funamental knowledge of BPM (IFN515 or equivalent) prior to commenceing this course.

Sample Structure **Semesters**

- Year 1, Semester 1
 Year 1, Semester 2
- Year 2, Semester 1

| Cada | THE |
|-------------------------|---|
| Code | Title |
| Year 1, Semeste | r 1 |
| IFN515 | Fundamentals of Business Process Management |
| IFN651 | Lean Six Sigma |
| IFN600 | Understanding Research |
| IFN700 | Project Management |
| Year 1, Semeste | r 2 |
| IFN650 | Business Process Analytics |
| IFN652 | Enterprise Business Process Management |
| IFN701 | Project 1 |
| Year 2, Semester 1 | |
| IFN702 | Project 2 |
| Master BPM Options List | |
| Master BPM Options List | |





QUT

Master of Information Technology

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | IT43 |
| CRICOS | 003776E |
| Duration (full-time) | 1.5 years |
| Duration (part-time domestic) | 3 years |
| Campus | Gardens Point |
| Total credit points | 144 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February LIS part-time only in July |
| Int. Start Months | July, February |
| Course Coordinator | Dr Hasmukh Morarji; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |

Domestic Entry requirements

Australian equivalent of a bachelor's degree in any discipline with a grade point average of at least 4.0 (on a 7-point scale)

OR

Evidence of recognised prior higher learning in the field of Information and Information Technology (e.g. at least five years of relevant full-time work experience). Industry certification alone is not sufficient evidence.

Applicants without an undergraduate degree in Information Technology (or equivalent) are recommended to select 3 Basic Elective Units as their electives. These electives are to be taken at the beginning of their studies.

International Entry requirements

Australian equivalent of a bachelor's degree in any discipline with a grade point average of at least 4.0 (on a 7-point scale)

OR

Evidence of recognised prior higher learning in the field of Information and Information Technology (e.g. at least five years of relevant full-time work experience). Industry certification alone is not sufficient evidence.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

This Program allows students who obtain IELTS 6.0 with no sub-band lower than 5.0 to undertake the Postgraduate Communication Pathway program where they undertake two Communication units as electives in the first semester of their Masters course.

Course Overview

Information technology is now firmly ensconced in society with all the other business practices that constitute modern organisations. This Master of Information Technology course has interfaculty contributions from the Faculties of Science & Engineering, Business, Creative Industries and Law, matching closely to their relevant IT research areas. Recognition of the burgeoning of specialised areas within the Information Industries is reflected in the structure of this course through ten different majors other than the "No Major" option:

- Software Architecture
- Network Management
- Enterprise Systems
- Games Production
- Games Design
- Security
- Library and Information Studies (Multimodal)
- Information Management
- Digital Environments
- Executive Information Practice

The structure of this course is designed so that a student does not have to decide on a major until after the first semester. Elective and core units may be selected first. Students must generally complete the core unit and seven units from within their major. The only exception to this structure is in the Library and Information Studies major.

Electives:

Students can generally select up to 4 electives; again, the exception is in the Library and Information Studies major, where students can select no more than two electives.

Students without an IT degree are recommended to select three Basic Elective Units as their electives.

Students wishing to use the Masters program as a pathway to a PhD program within QUT are recommended to select 4 advanced research or project units as their electives. These students are also advised to enrol in INN700 Introduction to Research as part of their major.

It is possible, for students who wish, to complete dual Master degrees. Students can receive up to four units of credit for a previous Masters degree as part of their elective unit block. Thus, they are only required to complete the major and core. Students may then receive their Masters degree from the Science and Engineering



Master of Information Technology

Faculty in two semesters.

Students undertaking units from the MBA program (GSN units) in the Graduate School of Business (GSB) must meet the MBA entry requirements. Please see the <u>GSB website</u> for further information.

The Library and Information Studies major is offered in multimodal delivery allowing students to complete their studies either face-to-face or online.

Online Delivery

The Library and Information Studies major is offered in multimodal delivery allowing students to complete their studies either face-to-face or online.

The Executive Information Practice major is offered in external mode allowing students to complete their studies online.

Course completion rules

Students should meet the following requirements before they are able to complete the Masters program: • Students are required to complete 144

credit points of units.

• Students are required to complete the specified core unit.

• Students wishing to specialise must complete the specific unit requirements for a major.

• Students wishing to complete their postgraduate studies without a single area of specialisation must satisfy the unit requirements for graduation with no major.

• Students may be allowed to take up to four units of electives. These units may be selected from postgraduate units outside of the Science and Engineering Faculty.

Early exit options

Students enrolled in this course may be eligible to exit their courses with a Graduate Certificate (IT85), after successful completion of an approved 48 credit points, or with a Graduate Diploma (IT37), after successful completion of an approved 96 credit points

Domestic Course structure

This course allows students who might like exposure to a number of units across several specialisation areas to undertake 84 credit points from any postgraduate Information Technology units offered. This program suits students who are not looking to undertake a discipline-specific postgraduate program, but rather complementary studies. This study area is the most flexible of the areas offered and thus is the default for students who do not select any major.

International Course structure

This course allows students who might like exposure to a number of units across several specialisation areas to undertake 84 credit points from any postgraduate Information Technology units offered. This program suits students who are not looking to undertake a discipline-specific postgraduate program, but rather complementary studies. This study area is the most flexible of the areas offered and thus is the default for students who do not select any major.

| Year | 2018 |
|-------------------------------------|--|
| QUT code | IT43 |
| CRICOS | 003776E |
| Duration (full-time) | 1.5 years |
| Duration (part-time domestic) | 3 years |
| Campus | Gardens Point |
| Total credit points | 144 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Hasmukh Morarji; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Science and Engineering Faculty 3138 8822 sef.enquiry@qut.edu.au |

Domestic Entry requirements

Australian equivalent of a bachelor's degree in any discipline with a grade point average of at least 4.0 (on a 7-point scale)

OR

Evidence of recognised prior higher learning in the field of Information and Information Technology (e.g. at least five years of relevant full-time work experience). Industry certification alone is not sufficient evidence.

Applicants without an undergraduate degree in Information Technology (or equivalent) are recommended to select 3 Basic Elective Units as their electives. These electives are to be taken at the beginning of their studies.

International Entry requirements

Australian equivalent of a bachelor's degree in any discipline with a grade point average of at least 4.0 (on a 7-point scale)

OR

Evidence of recognised prior higher learning in the field of Information and Information Technology (e.g. at least five years of relevant full-time work experience). Industry certification alone is not sufficient evidence.

Applicants without an undergraduate degree in Information Technology (or equivalent) are recommended to select 3 Basic Elective Units as their electives. These electives are to be taken at the beginning of their studies.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

This Program allows students who obtain IELTS 6.0 with no sub-band lower than 5.0 to undertake the Postgraduate Communication Pathway program where they undertake two Communication units as electives in the first semester of their Masters course.

Career Progression

Careers include business analyst, systems analyst, systems manager or database manager.

Course completion rules

Students should meet the following requirements before they are able to complete the Masters program:

- Students are required to complete 144 credit points of units.
- Students are required to complete the specified core unit.

• Students wishing to specialise must complete the specific unit requirements for a major.

• Students wishing to complete their postgraduate studies without a single area of specialisation must satisfy the unit requirements for graduation with no major.

• Students may be allowed to take up to four units of electives. These units may be selected from postgraduate units outside of the Science and Engineering Faculty.

Early exit options

Students enrolled in this course may be eligible to exit their courses with a Graduate Certificate (IT85), after successful completion of an approved 48 credit points, or with a Graduate Diploma (IT37), after successful completion of an approved 96 credit points

Domestic Course structure

This major provides you with advanced knowledge that will enable you to specialise in an area of business operations such as logistics and finance. You will build an understanding of enterprise system processes and configuration activities which occur in companies using enterprise systems. You will understand the business activities that these systems support, preparing you for business, technical or system support roles. The course provides you with hands-on experience with successful enterprise systems so that you can put into practice the theory that supports business activities.

This course also seeks to develop logical thinking and the capability to understand and deal with complex systems, within a business management framework.



Course completion rules

There are a number of requirements that need to be met before completing the program. Students are required to complete:

- 144 credit points of units and the specified core unit.
- the specific unit requirements for a major if seeking a single area of specialisation. Students not seeking a single area of specialisation may graduate with no major.
- 48 credit points of any postgraduate units.

Students may be allowed to take up to four units of electives. These units may be selected from postgraduate units outside of the Science and Engineering Faculty.

International Course structure

This major provides you with advanced knowledge that will enable you to specialise in an area of business operations such as logistics and finance. You will build an understanding of enterprise system processes and configuration activities which occur in companies using enterprise systems. You will understand the business activities that these systems support, preparing you for business, technical or system support roles. The course provides you with hands-on experience with successful enterprise systems so that you can put into practice the theory that supports business activities.

This course also seeks to develop logical thinking and the capability to understand and deal with complex systems, within a business management framework.

Course completion rules

Students should meet the following requirements before they are able to complete the Masters program:

• Students are required to complete 144 credit points of units.

• Students are required to complete the specified core unit.

• Students wishing to specialise must complete the specific unit requirements for a major.

• Students wishing to complete their postgraduate studies without a single area of specialisation must satisfy the unit requirements for graduation with no major.

• Students may be allowed to take up to four units of electives. These units may be selected from postgraduate units outside of the Science and Engineering Faculty.

Sample Structure

Semesters

- Core
- Enterprise Systems major:
- Elective Units

| Code | Title | |
|------------------------------------|---|--|
| Core | | |
| IFN700 | Project Management | |
| [INN500 replaced | d by IFN700 in 2015.] | |
| Enterprise Systems major: | | |
| IFN662 | Enterprise Systems and Applications | |
| Plus select 6 unit | ts from the following: | |
| IFN515 | Fundamentals of Business Process Management | |
| IFN600 | Understanding Research | |
| IFN645 | Data Mining Technology and Applications | |
| IFN650 | Business Process Analytics | |
| IFN651 | Lean Six Sigma | |
| IFN660 | Programming Language Theory | |
| IFN663 | Advanced Enterprise Architecture | |
| IFN665 | Advanced Topic 1 | |
| INN701 | Advanced Research Topics | |
| Elective Units | | |
| Select any four Postgraduate units | | |

| Year | 2018 |
|-------------------------------------|--|
| QUT code | IT43 |
| CRICOS | 003776E |
| Duration (full-time) | 1.5 years |
| Duration (part-time domestic) | 3 years |
| Campus | Gardens Point |
| Total credit points | 144 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Dom. Start Months | July, February July offering is part-time only. |
| Course Coordinator | Dr Hasmukh Morarji; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Kate Davis 3138 8822 sef.enquiry@qut.edu.au |

Domestic Entry requirements

Australian equivalent of a bachelor's degree in any discipline with a grade point average of at least 4.0 (on a 7-point scale)

OR

Evidence of recognised prior higher learning in the field of Information and Information Technology (e.g. at least five years of relevant full-time work experience). Industry certification alone is not sufficient evidence.

Applicants without an undergraduate degree in Information Technology (or equivalent) are recommended to select 3 Basic Elective Units as their electives. These electives are to be taken at the beginning of their studies.

International Entry requirements

Australian equivalent of a bachelor's degree in any discipline with a grade point average of at least 4.0 (on a 7-point scale)

OR

Evidence of recognised prior higher learning in the field of Information and Information Technology (e.g. at least five years of relevant full-time work experience). Industry certification alone is not sufficient evidence.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

This Program allows students who obtain IELTS 6.0 with no sub-band lower than 5.0 to undertake the Postgraduate Communication Pathway program where they undertake two Communication units as electives in the first semester of their Masters course.

Professional Recognition

Graduates from the special sation will be eligible for associate membership of the Australian Library and Information Association (ALIA).

Course completion rules

Before they are able to complete the Masters program:

- Students are required to complete 144 credit points of units.
- Students are required to complete the specified core unit.
- Students wishing to specialise must complete the specific unit requirements for a major.
- Students wishing to complete their postgraduate studies without a single area of specialisation must satisfy the unit requirements for graduation with no major.

• Students may be allowed to take up to four units of electives. These units may be selected from postgraduate units outside of the Science and Engineering Faculty.

Online delivery

The Library and Information Science major is offered in multimodal delivery allowing students to complete their studies either face-to-face or online.

Early exit options

Students enrolled in this course may be eligible to exit their courses with a Graduate Certificate (IT85), after successful completion of an approved 48 credit points, or with a Graduate Diploma (IT37), after successful completion of an approved 96 credit points.

Domestic Course structure

The Library and Information Science major provides graduates with the skills to find employment in the library and information industry. You will acquire the knowledge and expertise required to design, plan, develop, manage and evaluate library and information services to meet the information needs of clients.

Course completion rules

There are a number of requirements that need to be met before completing the program. Students are required to complete:

- 144 credit points of units and the specified core unit.
- the specific unit requirements for a major if seeking a single area of specialisation. Students not seeking a single area of specialisation may



Master of Information Technology (Library and Information Studies)

graduate with no major.24 credit points of project or advanced research units.

Students may be allowed to take up to two units of electives. These units may be selected from postgraduate units outside of the Science and Engineering Faculty.

International Course

structure

The Library and Information Science major provides graduates with the skills to find employment in the library and information industry. You will acquire the knowledge and expertise required to design, plan, develop, manage and evaluate library and information services to meet the information needs of clients.

Course completion rules

Before they are able to complete the Masters program:

- Students are required to complete 144 credit points of units.
- Students are required to complete the specified core unit.
- Students wishing to specialise must complete the specific unit requirements for a major.
- Students wishing to complete their postgraduate studies without a single area of specialisation must satisfy the unit requirements for graduation with no major.
- Students may be allowed to take up to two units of electives. These units may be selected from postgraduate units outside of the Science and Engineering Faculty.

Sample Structure

| Campio Otra | | |
|--|---|--|
| Code | Title | |
| Library and Infor | mation Science Strand | |
| IFN615 | Information Management | |
| [INN330 replaced by IFN615 in 2015.] | | |
| IFN610 | Management Issues for Information Professionals | |
| [INN331 replaced by IFN610 in 2015.] | | |
| Select two units from the Postgraduate Unit Options: | | |
| IFN611 | Information Retrieval | |
| IFN612 | Emerging Technologies for Information Practice | |
| IFN614 | Information Programs | |
| IFN617 | Managing and Organising Collections | |
| IFN620 | Professional Practice | |
| IFN616 | Online Information Services | |
| IFN665 | Advanced Topic 1 | |

This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?courseCode=IT43&courseID=33548. CRICOS No.00213J

The following units have been discontinued, but will count as a PG unit option:

INN532 Collections Management (disc 31/12/2016)

QUT

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | IT43 |
| CRICOS | 003776E |
| Duration (full-time) | 1.5 years |
| Duration (part-time domestic) | 3 years |
| Campus | Gardens Point |
| Total credit points | 144 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Hasmukh Morarji; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Science and Engineering Faculty 3138 8822 sef.enquiry@qut.edu.au |

Domestic Entry requirements

Australian equivalent of a bachelor's degree in any discipline with a grade point average of at least 4.0 (on a 7-point scale)

OR

Evidence of recognised prior higher learning in the field of Information and Information Technology (e.g. at least five years of relevant full-time work experience). Industry certification alone is not sufficient evidence.

Applicants without an undergraduate degree in Information Technology (or equivalent) are recommended to select 3 Basic Elective Units as their electives. These electives are to be taken at the beginning of their studies.

International Entry requirements

Australian equivalent of a bachelor's degree in any discipline with a grade point average of at least 4.0 (on a 7-point scale)

OR

Evidence of recognised prior higher learning in the field of Information and Information Technology (e.g. at least five years of relevant full-time work experience). Industry certification alone is not sufficient evidence.

Minimum English

requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

This Program allows students who obtain IELTS 6.0 with no sub-band lower than 5.0 to undertake the Postgraduate Communication Pathway program where they undertake two Communication units as electives in the first semester of their Masters course.

Domestic Course structure

This course allows students who might like exposure to a number of units across

several specialisation areas to undertake 84 credit points from any postgraduate Information Technology units offered. This program suits students who are not looking to undertake a discipline-specific postgraduate program, but rather complementary studies. This study area is the most flexible of the areas offered and thus is the default for students who do not select any major.

International Course structure

This course allows students who might like exposure to a number of units across several specialisation areas to undertake 84 credit points from any postgraduate Information Technology units offered. This program suits students who are not looking to undertake a discipline-specific postgraduate program, but rather complementary studies. This study area is the most flexible of the areas offered and thus is the default for students who do not select any major.

Sample Structure

| Code | Title | |
|--|---------------------|--|
| Core | | |
| IFN700 | Project Management | |
| [INN500 replaced | by IFN700 in 2015.] | |
| Electives | | |
| - Select one from: Any IT postgraduate unit starting INN5xx, INN6xx, INN7xx of IFN6xx. | | |
| Plus | | |
| - Select any 6 (total of 72cp) postgraduate IT units NOT in the "Basic Unit List". | | |
| Plus | | |
| - Select 48 credit points of any postgraduate units | | |

QUT

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | IT44 |
| CRICOS | 053123F |
| Duration (full-time) | 2 years |
| Duration (part-time domestic) | 4 years |
| Campus | Gardens Point |
| Total credit points | 192 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Hasmukh Morarji; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Science and Engineering Faculty 3138 8822 sef.enquiry@qut.edu.au |

Domestic Entry requirements

Australian equivalent of a bachelor's degree in any discipline with a grade point average of at least 4.0 (on a 7-point scale)

OR

Evidence of recognised prior higher learning in the field of Information and Information Technology (e.g. at least five years of relevant full-time work experience). Industry certification alone is not sufficient evidence.

International Entry requirements

Australian equivalent of a bachelor's degree in any discipline with a grade point average of at least 4.0 (on a 7-point scale)

OR

Evidence of recognised prior higher learning in the field of Information and Information Technology (e.g. at least five years of relevant full-time work experience). Industry certification alone is not sufficient evidence.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

This Program allows students who obtain IELTS 6.0 with no sub-band lower than 5.0 to undertake the Postgraduate Communication Pathway program where they undertake two Communication units as electives in the first semester of their Masters course.

Description

Information technology is now firmly ensconced in society with all the other business practices that constitute modern organisations. This Master of Information Technology (Advanced) course has interfaculty contributions from the Faculties of Science & Engineering, Business, Creative Industries and Law, matching closely to their relevant IT research areas. Recognition of the burgeoning of specialised areas within the Information Industries is reflected in course structures that provide for ten different majors other than the "No Major" option:

- Software Architecture
- Network Management
- Enterprise Systems
- Games Production
- Games Design
- Security
- Library and Information Studies
- Information Management
- Digital Environments
- Executive Information Practice

The structure of this course is designed so that a student does not have to decide on a major until after the first semester. Elective and core units may be selected first. Students must generally complete the core unit and seven units from within their major. The only exception to this structure is in the Library and Information Studies major.

Electives:

Students can generally select up to 4 electives; again, the exception is in the Library and Information Studies major, where students can select no more than two electives.

Students without an IT degree are recommended to select three Basic Elective Units as their electives.

Advanced Research Units (Complementary Studies):

Students who enrol in the Masters Advanced program must complete four advanced research or project units. It is recommended that students complete advanced research and project units in the latter half of their course.

Students wishing to use the Masters Advanced program as a pathway to a PhD program within QUT are advised to enrol in INN700 Introduction to Research as part of their major and take INN701 Advanced Research Methodologies as an elective.

It is possible for students to complete dual Master degrees. Students can receive up to four units of credit for a previous Masters degree as part of their elective unit block. Thus, they are only required to complete the major and core. Students may then receive their Masters degree from the Science and Engineering Faculty in two semesters.



Master of Information Technology (Advanced)

Students undertaking units from the MBA program (GSN units) in the Graduate School of Business (GSB) must meet the MBA entry requirements. Please see the <u>GSB website</u> for further information.

Course completion rules

Students should meet the following requirements before they are able to complete the Masters Advanced program: • Students are required to complete 192 credit points of units.

• Students are required to complete the specified core unit.

• Students seeking a single area of specialisation must complete the specific unit requirements for a major.

• Students not seeking a single area of specialisation may graduate with no major.

• Students must complete 48 credit points of project or advanced research units.

• Students may be allowed to take up to four units of electives. These units may be selected from postgraduate units outside of the Science and Engineering Faculty.

Early exit options

Students enrolled in this course may be eligible to exit their courses with a Graduate Certificate (IT85), after successful completion of an approved 48 credit points, or with a Graduate Diploma (IT37), after successful completion of an approved 96 credit points, or with a Masters (IT43) after successful completion of an approved 144 credit points.

Domestic Course structure

This course allows students who might like exposure to a number of units across several specialisation areas to undertake 84 credit points from any postgraduate Information Technology units offered. This program suits students who are not looking to undertake a discipline-specific postgraduate program, but rather complementary studies. This study area is the most flexible of the areas offered and thus is the default for students who do not select any major.

International Course structure

This course allows students who might like exposure to a number of units across several specialisation areas to undertake 84 credit points from any postgraduate Information Technology units offered. This program suits students who are not looking to undertake a discipline-specific postgraduate program, but rather complementary studies. This study area is the most flexible of the areas offered and thus is the default for students who do not select any major.

Sample Structure

- <u>Core</u>
- Major Study Areas
- Special Entry Requirements

| Code | Title | |
|--|--------------------|--|
| Core | | |
| IFN700 | Project Management | |
| Major Study Areas | | |
| Students choose one of the following majors (see Major option list): | | |
| No Major (Information Technology) | | |
| Digital Environments (discontinued) | | |
| Enterprise Systems | | |
| Executive Information Practice | | |
| Games Design (discontinued) | | |
| Games Production (discontinued) | | |
| Information Management | | |
| Library and Information Studies | | |
| Network Management | | |
| Security | | |
| Software Architecture (discontinued) | | |
| Special Entry Requirements | | |

Library and Information Studies:

A bachelor degree in any discipline other than library and information science with a grade point average of at least 4.5 (On a 7 points scale).

Master of Business Process Management

Handbook

| Year | 2018 |
|-------------------------------------|---|
| QUT code | IT53 |
| CRICOS | 062622A |
| Duration (full-time) | 1.5 years |
| Duration (part-time domestic) | 3 years |
| Campus | Gardens Point |
| Total credit points | 144 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Wasana Bandara; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | Science and Engineering Faculty 3138 8822 sef.enquiry@qut.edu.au |

Domestic Entry requirements

To be eligible for this course, applicants must have a bachelor degree with a grade point average of at least 4.0 (on a 7-point scale) AND demonstrated competence in the basic skills and concepts of personal or office computer usage.

International Entry requirements

A bachelor degree with a grade point average of at least 4.0 (on a 7-point scale) AND demonstrated competence in the basic skills and concepts of personal or office computer usage.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

This Program allows students who obtain IELTS 6.0 with no sub-band lower than 5.0 to undertake the Postgraduate Communication Pathway program where they undertake two Communication units as electives in the first semester of their Masters course.

Course Overview

The Master of Business Process Management will provide graduates with the skills and knowledge to create and align information systems to effectively support business and enable business strategy.

The program examines business-IT alignment issues through appropriate theory and skill development, and provides career enhancement opportunities into senior management and governance roles.

Students may undertake study in the areas of corporate systems and business process management, IT professional services (including project management and IT consulting), enterprise architecture and systems, and information and knowledge management within business processes.

Course Structure

Students are required to complete 144 credit points of units.

- 48 credit points (4 units) of IT related units (Block A)

- 48 credit points (4 units) of Business Process Core units (Block B) - 48 credit points (4 units) of General Elective units (Block C)

Students may be eligible to receive a Graduate Certificate in Business Process Management after completing 48 credit points (4 units) consisting of the four specified units.

Students may also be eligible to receive a Graduate Certificate in Corporate Systems Management after completing 48 credit points (4 units) consisting of the four specified units.

Unit Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:

Postgraduate Translation Table

If you have completed the unit(s) listed under the "Translation Unit Codes" column, you are not permitted to enrol in the listed new code.

Domestic Course structure

This degree provides graduates with the skills and knowledge to design, execute and manage business process improvement initiatives at project, program and organisation levels. Students undertake study in areas of business/process analysis, process management, process modelling, process improvement, and process automation.

There are complementary units in professional services (including project management and IT consulting), enterprise systems, and information and knowledge management within business processes.

Course completion rules

Students are required to complete 144 credit points of units.

- 48 credit points (4 units) of IT related units (Block A)
- 48 credit points (4 units) of Business Process Core units (Block B)
- 48 credit points (4 units) of General Elective units (Block C)

Students may be eligible to receive a



Master of Business Process Management

Graduate Certificate in Business Process Management after completing 48 credit points (4 units) consisting of the four specified units.

Students may also be eligible to receive a Graduate Certificate in Corporate Systems Management after completing 48 credit points (4 units) consisting of the four specified units.

International Course structure

This degree provides graduates with the skills and knowledge to design, execute and manage business process improvement initiatives at project, program and organisation levels. Students undertake study in areas of business/process analysis, process management, process modelling, process improvement, and process automation.

There are complementary units in professional services (including project management and IT consulting), enterprise systems, and information and knowledge management within business processes.

Course completion rules

Students are required to complete 144 credit points of units.

- 48 credit points (4 units) of IT related units (Block A)
- 48 credit points (4 units) of Business Process Core units (Block B)
- 48 credit points (4 units) of General Elective units (Block C)

Students may be eligible to receive a Graduate Certificate in Business Process Management after completing 48 credit points (4 units) consisting of the four specified units.

Students may also be eligible to receive a Graduate Certificate in Corporate Systems Management after completing 48 credit points (4 units) consisting of the four specified units.

Sample Structure

- BLOCK A IT RELATED UNITS (48cp) - Select 4 Units
- BLOCK B BUSINESS PROCESS RELATED CORE UNITS (48cp) -Select 4 units
- BLOCK C GENERAL ELECTIVE
 UNITS (48cp) Select 4 units
- Grad Cert Business Process
 Management IT61 exit point only
- Grad Cert Corporate Systems
 Management IT62 exit point only

Code Title BLOCK A - IT RELATED UNITS (48cp) Select 4 Units

1. 4 units from IT Graduate Gateway units (Recommended for students who studied IT).

OR

2. 4 units from Non-IT Graduate Basic Units (Recommend for students who dont have IT background).

OR

3. Students can also mix any 4 units from IT-Graduate and Non-IT Graduate Units.

| BLOCK A: IT Graduates Gateway Units | |
|---|---|
| IFN504 | Corporate Information Systems |
| IFN509 | Data Manipulation |
| IFN600 | Understanding Research |
| IFN615 | Information Management |
| IFN645 | Data Mining Technology and Applications |
| IFN647 | Advanced Information Storage and Retrieval |
| IFN662 | Enterprise Systems and Applications |
| IFN700 | Project Management |
| INN700 | Introduction to Research |
| The following units have been discontinued, but will still count as a | |

Gateway Unit Option: INN221 Technology Management (disc 31/12/2016)

INN322 Information Systems Consulting (disc 31/12/2015)

| BLOCK B - BUSINESS PROCESS RELATED CORE UNITS (48cp) - Select 4 units | | |
|---|--|--|
| IFN610 | Management Issues for Information Professionals | |
| IFN650 | Business Process Analytics | |
| IFN651 | Lean Six Sigma | |
| IFN652 | Enterprise Business Process Management | |
| MGN505 | Consulting and Change Management | |
| The following units have been discontinued, but will still count as a Business Process Management Unit Option: | | |
| INN326 Advanced Process Modelling (disc 31/12/2015) | | |
| INN690 Minor Project 1 (disc 30/06/2015) | | |
| BLOCK C - GENERAL ELECTIVE UNITS (48cp) - Select 4 units | | |
| General electives can be selected from the following options: | | |

1. IT Industry or research project (There are 12cps, 24cps and 48 cps project unit depending on the scale of project).

2. IT Postgraduate units including IT

Gateway units or Non-IT Graduate Units.

3. Block B Core units.

4. QUT University wide postgraduate units - that will align to the Business Process Management field and/ or your career path. This should be discussed and approved by the Course Coordinator.

| Coordinator. | | | |
|--|---|--|--|
| | Grad Cert Business Process Management IT61 exit point only | | |
| IFN615 | Information Management | | |
| IFN650 | Business Process Analytics | | |
| IFN651 | Lean Six Sigma | | |
| IFN662 | Enterprise Systems and Applications | | |
| | Grad Cert Corporate Systems | | |
| Manageme | ent IT62 exit point only | | |
| IFN610 | Management Issues for Information Professionals | | |
| IFN665 | Advanced Topic 1 | | |
| Students must choose 2 of the following units from the Basic Unit Options: | | | |
| IFN504 | Corporate Information Systems | | |
| IFN515 | Fundamentals of Business Process Management | | |
| IFN700 | Project Management | | |
| The following unit has been discontinued, but will still count as a Basic Unit Option: | | | |
| INN221 Technology Management (disc 31/12/2016) | | | |



| Year | 2018 |
|-------------------------------------|--|
| QUT code | PH80 |
| CRICOS | 043548G |
| Duration (full-time) | 1.5 years |
| Duration (part-time domestic) | 3 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: CSP \$9,400 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$29,000 per year full-time (96 credit points) |
| Total credit points | 144 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Andrew Fielding; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirements

- A completed recognised bachelor degree (or higher award) in physics or bachelor degree in science with a major in physics; or
- Applicants with other qualifications (eg medical engineering) may enrol with the approval of the course coordinator. In some instances, a modified program may be necessary.

International Entry requirements

Academic entry requirements

A completed recognised bachelor degree (or higher award) in physics or in science with a major in physics.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Design

Stage 1— Graduate Diploma (PH71) comprises assessed coursework such as advanced lectures, seminars, reading units or independent study. Full time students will need an average of 14 hours a week of formal contact (seven hours for parttime students). Students can graduate with a Graduate Diploma in Medical Physics after satisfactory completion of Stage 1.

Stage 2— Master of Applied Science (PH80) students undertake a program of supervised research and investigation that can be completed at QUT or in a suitable external institution.

Professional Recognition

The course is accredited by the Australasian College of Physical Sciences and Engineers in Medicine.

Domestic Course structure

Stage 1—Graduate Diploma (PH71) comprises assessed coursework such as advanced lectures, seminars, reading units or independent study. Full-time students will need an average of 14 hours a week of formal contact (seven hours for part-time students). Students can graduate with a Graduate Diploma in Medical Physics after satisfactory completion of Stage 1.

Stage 2—Master of Applied Science (PH80) students undertake a program of supervised research and investigation that can be completed at QUT or in a suitable external institution.

International Course structure

Stage 1—Graduate Diploma (PH71) comprises assessed coursework such as advanced lectures, seminars, reading units or independent study. Full-time students will need an average of 14 hours a week of formal contact (seven hours for parttime students). Students can graduate with a Graduate Diploma in Medical Physics after satisfactory completion of Stage 1.

Stage 2—Master of Applied Science (PH80) students undertake a program of supervised research and investigation that can be completed at QUT or in a suitable external institution.

Sample Structure Semesters

- STAGE 1: Students must complete units from the list below, totalling 96 credit points:
- <u>Year 1, Semester 1 (February to</u> June)
- <u>Year 1, Semester 2 (July to</u> <u>October)</u>
- STAGE 2: Project over One Semester or Summer Program

| Code | Title | |
|--|-------------------------------------|--|
| STAGE 1: Students must complete units from the list below, totalling 96 credit points: | | |
| Year 1, Semeste | r 1 (February to June) | |
| LSN104 | Advancing Anatomy and Physiology | |
| PCN113 | Radiation Physics | |
| ENN515 | Total Quality Management | |
| PCN211 | Physics of Medical Imaging | |
| Year 1, Semester 2 (July to October) | | |
| PCN112 | Medical Imaging Science | |
| PCN212 | Radiotherapy | |
| PCN214 | Health and | |

Master of Applied Science (Medical Physics)

| | Occupational Physics |
|--|---|
| PCN218 | Research Methodology and Professional Studies |
| STAGE 2: Project over One Semester or Summer Program | |
| PCN520 | Project (FT) |



QUT

Master of Project Management

Handbook

| Year | 2018 |
|-----------------------------------|---|
| QUT code | PM20 |
| CRICOS | 084927B |
| Duration (full-time) | 1.5 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$21,300 per year full-time (96 credit points) |
| International fee (indicative) | 2018: \$31,800 per year full-time (96 credit points) |
| Total credit points | 144 |
| Credit points full-time sem. | 48 |
| Start months | July, February |
| Int. Start Months | July, February |
| Course Coordinator | Dr Madhav Nepal; ph: +61 7 3138 8822; email: sef.enquiry@qut.edu.au |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirements

A completed recognised bachelor degree (or higher) in engineering or built environment; *or*

A completed recognised bachelor degree (or higher) in any discipline with at least 6 months (full-time or equivalent) professional project management work experience; *or*

Successful completion of QUT's <u>Graduate</u> <u>Certificate in Project Management</u> course.

International Entry requirements

Academic entry requirement

A completed recognised bachelor degree (or higher) in engineering or built environment disciplines; *or*

A completed recognised bachelor honours degree (or higher) in any discipline with at least six months (fulltime or equivalent) professional project management work experience in any discipline. Students applying on the basis of work experience must submit a detailed CV including position details and employment statements; *or*

Successful completion of QUT's <u>Graduate</u> <u>Certificate of Project Management</u> course.

Minimum English

requirements Students must meet the English

proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Course Overview

The QUT Master of Project Management is designed for Project Managers and project management cognate professionals from a wide range of industries; including engineering and the resources sector.

With this course you will gain the advanced discipline knowledge and skills to lead and project manage large and complex projects across multiple industry sectors. Designed to offer flexible study choices, the course content is available in a variety of blended learning delivery modes including online, face to face on campus and block learning. See the Study Choices information below for more detail on how you can study this course.

Course Design

The MPM is designed around a set of core project management topics that underpin the knowledge required for the more advanced discipline units. The course will provide you with the critical skills to apply advanced knowledge of contemporary project management research and practice, and creatively solve complex project management problems. You will learn to communicate effectively within various social, cultural and professional contexts across and within stakeholder and discipline groups. You will demonstrate leadership, effective management and co-ordination of project teams and be able to work independently, ethically and collaboratively.

The course structure consists of 144 credit points (12 units) arranged as follows:

1) 48 credit points (4 units) of core project management units:

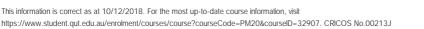
Two of these units should be completed in this order: PMN501 Project Management Essentials 1, in the first half of the semester, followed by PMN502 Project Management Essentials 2 in the second half of the semester.

2) 96 credit points (8 units) of core advanced discipline units:

Your skills and knowledge are developed through the advanced discipline and 'Project Investigation' units and further honed in PMN608 Managing the Project, the capstone unit. PMN608 should be taken in the last semester of study.

Study Choices

You can study PMN501, PMN502, PMN503 and PMN504 in the Master of Project Management internally on campus at Gardens Point or externally Online. When you self-enrol in a unit you must select from the list of attendance modes available that matches how you wish to study that unit. If you select the online study mode for a unit, your studies will all take place electronically, off campus. If you select to study a unit internally, you will be required to attend scheduled classes on campus.





Master of Project Management

Studying On Campus (Internally)

There are different ways you can study some project management units internally. You will be able to identify which type of internal study is offered when you self-enrol in a unit. If a unit is described as 'Internal' this typically indicates a standard delivery mode where classes will be scheduled each week for the duration of the specified teaching period. If a unit is described as Internal Block Mode, this indicates that it will be delivered in an intensive learning mode, such as whole day or weekend sessions or seminars. Please ensure you check your session dates.

Special Course Requirements

Students wishing to undertake units through online study will require the necessary technology to facilitate this mode of study.

Pathways to Further Study

The QUT Master of Project Management is located at Level 9 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant Doctoral level studies.

International Combined Masters Packages

Students admitted to a combined masters pathway (BN87 + PM20 or EN50 + PM20) may progress to their second degree on completion of the first, and are referred to the combined package study plan for their chosen combination, available on the course websites. Separate awards are granted for each degree completed.

Professional Membership

Endorsed by the Australian Institute of Project Management (AIPM).

Domestic Course structure

The Master of Project Management is designed around a set of core project management topics that underpin the knowledge required for the more advanced discipline units. The course will provide you with the critical skills to apply advanced knowlege of contemporary project management research and practice and creatively solve complex project management problems. You will learn to communicate effectively within various social, cultural and professional contexts across and within stakeholder and discipline groups. You will demonstrate leadership, effective management and coordination of project teams and be able to work independently, ethically and

collaboratively.

The course structure consists of 144 credit points (12 units) arranged as follows:

1) 48 credit points (4 units) of core project management units

Two of these units should be completed in this order: PMN501 Project Management Essentials 1, in the first half of the semester, followed by PMN502 Project Management Essentials 2 in the second half of the semester.

2) 96 credit points (8 units) of core advanced discipline units

Your skills and knowledge are developed though the advanced discipline and Project Investigation units and further honed in PMN608 Managing the Project, the capstone unit. PMN608 should be taken in the last semester of study.

Special course requirements

Students wishing to undertake units through online study will require the necessary technology to facilitate this mode of study.

Pathways to further study

The QUT Master of Project Management is located at Level 9 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant doctoral level studies.

International Course structure

The Master of Project Management is designed around a set of core project management topics that underpin the knowledge required for the more advanced discipline units. The course will provide you with the critical skills to apply advanced knowlege of contemporary project management research and practice and creatively solve complex project management problems. You will learn to communicate effectively within various social, cultural and professional contexts across and within stakeholder and discipline groups. You will demonstrate leadership, effective management and coordination of project teams and be able to work independently, ethically and collaboratively.

The course structure consists of 144 credit points (12 units) arranged as follows:

1) 48 credit points (4 units) of core project management units:

Two of these units should be completed in this order: PMN501 Project Management Essentials 1, in the first half of the semester, followed by PMN502 Project Management Essentials 2 in the second half of the semester.

2) 96 credit points (8 units) of core advanced discipline units:

Your skills and knowledge are developed though the advanced discipline and 'Project Investigation' units and further honed in PMN608 Managing the Project, the capstone unit. PMN608 should be taken in the last semester of study.

Special course requirements

Students wishing to undertake units through online study will require the necessary technology to facilitate this mode of study.

Pathways to further study

The QUT Master of Project Management is located at Level 9 of the Australian Qualifications Framework (AQF). Graduates may be eligible for discipline relevant doctoral level studies.

Combined masters packages for international students

If you are admitted to either of:

- Master of Engineering and Master of Project Management package
- Master of Engineering Management and Master of Project Management package

you can progress to PM20 Master of Project Management on completion of your first program (either BN87 or EN50) with a reduced course duration.

You will receive an award for each degree completed.

Refer to the study plan in PM20 that corresponds to the program you have completed (either EN50 or BN87) for your first degree.

Sample Structure Semesters

- Year 1, Semester 1
- Year 1, Semester 2
- Year 2, Semester 1

| Code | Title |
|-----------------------------|------------------------------------|
| Year 1, Semester 1 | |
| PMN501 | Project Management Essentials 1 |
| PMN502 | Project Management Essentials 2 |
| Core unit PMN501 is assumed | |



Master of Project Management

knowledge for PMN502, and should be taken in the first half of the semester of study before attempting PMN502 in the second half of the semester

| PMN503 | Systems in Project Management | |
|---|----------------------------------|--|
| PMN504 | People and Projects | |
| Year 1, Ser | nester 2 | |
| PMN601 | Projects and Performance | |
| PMN603 | Project Investigation 1 | |
| PMN605 | Strategic Project Procurement | |
| PMN607 | Strategic Risk Management | |
| Year 2, Ser | mester 1 | |
| PMN602 | Organisations and Projects | |
| PMN604 | Strategy and Projects | |
| PMN606 | Project Investigation 2 | |
| PMN608 | Managing the Project | |
| PMN608 is a captstone unit and should be taken in the last semester of study. | | |

Combined Masters Package Pathways Master of Engineering Management (BN87) plus Master of Project Management (PM20) Master of Engineering (EN50) plus

Master of Project Management (PM20)

If you are admitted to one of these pathways, once you successfully complete your Master of Engineering Management (BN87) or your Master of Engineering (EN50) including BEN610/PMN610 Project Management Principles, you may progress to the Master of Project Management (PM20) and recieve 48 credit points (1 semester) of advanced standing in PM20.

Please follow the study plan in PM20 for your combined package that corresponds to your first degree (either BN87 or EN50).

Semesters

- <u>Combined Masters Program Year</u>
 2
- PM20 Study Plan for BN87 Master of Engineering Management graduates
- PM20 Study Plan for EN50 Master of Engineering graduates

Code Title

Combined Masters Program - Year 2

To undertake PM20 Master of Project Management in Year 2 of your combined masters program, you will have completed either the BN87 or EN50 program in Year 1. Please follow the Year 2 study plan below that corresponds to your first program.

PM20 Study Plan for BN87 Master of Engineering Management graduates February Entry Year 2, Semester 1 Systems in Project PMN503 Management PMN602 Organisations and Projects PMN603 Project Investigation 1 PMN604 Strategy and Projects Year 2, Semester 2 PMN605 Strategic Project Procurement PMN606 Project Investigation 2 PMN607 Strategic Risk Management PMN608 Managing the Project Mid Year Entry Year 2, Semester 2 Systems in Project **PMN503** Management PMN603 Project Investigation 1 PMN605 Strategic Project Procurement PMN607 Strategic Risk Management Year 3, Semester 1 PMN602 Organisations and Projects PMN604 Strategy and Projects PMN606 Project Investigation 2 PMN608 Managing the Project PM20 Study Plan for EN50 Master of **Engineering graduates** February Entry Year 2, Semester 1 PMN601 Projects and Performance PMN602 Organisations and Projects PMN603 Project Investigation 1 PMN604 Strategy and Projects Year 2, Semester 2 PMN605 Strategic Project Procurement PMN606 Project Investigation 2 PMN607 Strategic Risk Management PMN608 Managing the Project Mid Year Entry Year 2, Semester 2 PMN601 Projects and Performance PMN603 Project Investigation 1 PMN605 Strategic Project Procurement PMN607 Strategic Risk Management Year 3, Semester 1 PMN602 Organisations and Projects PMN604 Strategy and Projects PMN606 Project Investigation 2 PMN608 Managing the Project



| Year | 2018 |
|-------------------------------------|--|
| QUT code | BN71 |
| CRICOS | 007897G |
| Duration (full-time) | 1 year |
| Duration (part-time domestic) | 2 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$30,400 per year full-time if you exceed the maximum time under RTP |
| International fee (indicative) | 2018: \$33,800 per year full-time (96 credit points) |
| Total credit points | |
| Int. Start Months | Entry is available at any time subject to approval |
| Course Coordinator | Prof Christine Bruce (APD) |
| Discipline Coordinator | Science and Engineering Faculty 3138 2595 sef.research@qut.edu.au |

Domestic Entry requirements Academic entry requirement

A completed recognised bachelor honours degree including a major relevant to the intended area of study; *or*

A completed recognised bachelor degree (or equivalent) including a major relevant to the intended area of study with a minimum grade point average (GPA) score of 5.0 (on QUT's 7 point scale) and relevant professional and/ or research experience as determined by Faculty.

Research proposals must be submitted with your application. Proposed research projects are subject to supervisor availability and resources available within the faculty to support the proposed research topic.

Application Guide

Applicants are asked to nominate a supervisor and topic when submitting a formal application. An application is likely to be more successful where a supervisor and topic are well matched.

Applicants should ensure that there is a genuine fit with the potential supervisor's research interests by looking at the interests of the researchers within the relevant school as described on the QUT <u>Science and Engineering Faculty</u> website. Applicants are encouraged to contact the postgraduate research enquiries team for assistance at (sef.research@qut.edu.au)

This contact should include a transcript of academic records, the topic area which you wish to study, the school in which you wish to undertake your research, and if known, the name of a potential supervisor. The HDR Admissions Officer may ask you for further information to assist with your enquiry. The information will be passed onto the nominated (or relevant) school or supervisor.

Faculty Research Contact

Email: sef.research@qut.edu.au

Telephone: +61 7 3138 4783

Level 4, O Podium Gardens Point Campus, George St, QLD 4000

Application Submission

You can submit an <u>online application</u> or hardcopy using the <u>PR Form</u>. Hardcopy applications can be emailed to the QUT HDR Admissions Office at (<u>research.enquiries@qut.edu.au</u>). Applications must include all supporting documentations including your detailed research proposal.

International Entry requirements

Academic entry requirement

A completed recognised bachelor honours degree including a major relevant to the intended area of study; *or*

A completed recognised bachelor degree (or equivalent) including a major relevant to the intended area of study with a minimum grade point average (GPA) score of 5.0 (on QUT's 7 point scale) and relevant professional and/ or research experience as determined by Faculty.

Research proposals must be submitted with your application. Proposed research projects are subject to supervisor availability and resources available within the faculty to support the proposed research topic.

Application Guide

Applicants are asked to nominate a supervisor and topic when submitting a formal application. An application is likely to be more successful where a supervisor and topic are well matched.

Applicants should ensure that there is a genuine fit with the potential supervisor's research interests by looking at the interests of the researchers within the relevant school as described on the QUT <u>Science and Engineering Faculty website</u>. Applicants are encouraged to contact the postgraduate research enquiries team for assistance at (sef.research@qut.edu.au)

This contact should include a transcript of academic records, the topic area which you wish to study, the school in which you wish to undertake your research, and if known, the name of a potential supervisor. The HDR Admissions Officer may ask you for further information to assist with your enquiry. The information will be passed onto the nominated (or relevant) school or supervisor.

Faculty Research Contact Email: sef.research@gut.edu.au

_ . .

Telephone: +61 7 3138 4783

Level 4, O Podium Gardens Point Campus, George St, QLD 4000

Application Submission

You can submit an application using the <u>FR Form</u>. Applications can be emailed to QUT Admissions

(qut.intadmission@qut.edu.au).

Applications must include all supporting documentations including your detailed research proposal.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Further Information

Science and Engineering Research, Phone: +61 7 3138 2595, Email: sef.research@qut.edu.au

Domestic Course structure

This degree consists of coursework, which can be up to one-third of the course, and research, which must be at least two-thirds of the course. The assessed coursework may be in the form of advanced lectures, seminars, reading courses or independent study designed to focus on information retrieval skills. The Faculty also recommends all students undertake a QUT facilitated Research Writing Program. The research component is a program of supervised research and investigation at a level of scientific competence significantly higher than that expected from an undergraduate degree and, typically, a masters thesis does not need to be as substantial as a Doctor of Philosophy thesis.

Students undertake a program of research and investigation on a topic approved by the Academic Board. All projects should be sponsored either by outside agencies such as industry, government authorities, or professional organisations, or by the university itself.

Getting Started:

Choose a topic:

Step 1: Identify your discipline and choose a topic

- Construction Management
 - Quantity Surveying
 - Property Economics
 - Project Management
 - Planning

Surveying

Step 2: Contact the Science and Engineering Faculty's <u>research degree</u> <u>coordinator</u>.

QUT researchers are available to discuss your topic with you to ensure it has the right scope and scale for your preferred research degree. There are also opportunities for you to align your interests with QUT's major ongoing research programs. Explore <u>research</u> <u>topics</u>.

Find a supervisor

Connecting with a supervisor for your project is of vital importance. Finding a supervisor

International Course structure

This degree consists of coursework, which can be up to one-third of the course, and research, which must be at least two-thirds of the course. The assessed coursework may be in the form of advanced lectures, seminars, reading courses or independent study designed to focus on information retrieval skills. The Faculty also recommends all students undertake a QUT facilitated Research Writing Program. The research component is a program of supervised research and investigation at a level of scientific competence significantly higher than that expected from an undergraduate degree and, typically, a masters thesis does not need to be as substantial as a Doctor of Philosophy thesis.

Students undertake a program of research and investigation on a topic approved by the Academic Board. All projects should be sponsored either by outside agencies such as industry, government authorities, or professional organisations, or by the university itself.

Getting Started:

Choose a topic:

Step 1: Identify your discipline and choose a topic

- Construction Management
- Quantity Surveying
- Property Economics
- Project Management
- Planning
- Surveying

Step 2: Contact the Science and Engineering Faculty's <u>research degree</u> <u>coordinator</u>.

QUT researchers are available to discuss your topic with you to ensure it has the

right scope and scale for your preferred research degree. There are also opportunities for you to align your interests with QUT's major ongoing research programs. Explore <u>research</u> <u>topics</u>.

Find a supervisor

Connecting with a supervisor for your project is of vital importance. Finding a supervisor



QUT

Master of Engineering (Research)

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | BN72 |
| CRICOS | 003465J |
| Duration (full-time) | 1 year |
| Duration (part-time domestic) | 2 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$30,000 per year full-time if you exceed the maximum time under RTP |
| International fee (indicative) | 2018: \$33,500 per year full-time (96 credit points) |
| Total credit points | |
| Start months | December, November, October, September, August, July, June, May, April, March, February, January |
| Int. Start Months | December, November, October, September, August, July, June, May, April, March, February, January |
| Course Coordinator | Prof Christine Bruce (APD) |
| Discipline Coordinator | Science and Engineering Faculty 3138 2595 sef.research@qut.edu.au |

Domestic Entry requirements Academic entry requirement

A completed recognised bachelor honours degree including a major relevant to the intended area of study; *or*

A completed recognised four year bachelor degree (or equivalent) including a major relevant to the intended area of study with a minimum grade point average (GPA) score of 5.0 (on QUT's 7 point scale) *and* relevant professional and/ or research experience as determined by Faculty.

Research proposals must be submitted with your application. Proposed research projects are subject to supervisor availability and resources available within the faculty to support the proposed research topic.

Application Guide

Applicants are asked to nominate a supervisor and topic when submitting a formal application. An application is likely to be more successful where a supervisor and topic are well matched.

Applicants should ensure that there is a genuine fit with the potential supervisor's research interests by looking at the interests of the researchers within the relevant school as described on the QUT <u>Science and Engineering Faculty</u> website. Applicants are encouraged to contact the postgraduate research enquiries team for assistance at (sef.research@qut.edu.au)

This contact should include a transcript of academic records, the topic area which you wish to study, the school in which you wish to undertake your research, and if known, the name of a potential supervisor. The HDR Admissions Officer may ask you for further information to assist with your enquiry. The information will be passed onto the nominated (or relevant) school or supervisor.

Faculty Research Contact

Email: sef.research@qut.edu.au

Telephone: +61 7 3138 4783

Level 4, O Podium Gardens Point Campus, George ST, QLD 4000

Application Submission

You can submit an <u>online application</u> or hardcopy using the <u>PR Form</u>. Hardcopy applications can be emailed to the QUT HDR Admissions Office at

(research.enquiries@qut.edu.au).

Applications must include all supporting documentations including your detailed research proposal.

International Entry requirements

Academic entry requirement

A completed recognised bachelor honours degree including a major relevant to the intended area of study; *or*

A completed recognised bachelor degree (or equivalent) including a major relevant to the intended area of study with a minimum grade point average (GPA) score of 5.0 (on QUT's 7 point scale) and relevant professional and/ or research experience as determined by Faculty.

Research proposals must be submitted with your application. Proposed research projects are subject to supervisor availability and resources available within the faculty to support the proposed research topic.

Application Guide

Applicants are asked to nominate a supervisor and topic when submitting a formal application. An application is likely to be more successful where a supervisor and topic are well matched.

Applicants should ensure that there is a genuine fit with the potential supervisor's research interests by looking at the interests of the researchers within the relevant school as described on the QUT <u>Science and Engineering Faculty website</u>. Applicants are encouraged to contact the postgraduate research enquiries team for assistance at (<u>sef.research@qut.edu.au</u>)

This contact should include a transcript of academic records, the topic area which you wish to study, the school in which you wish to undertake your research, and if known, the name of a potential supervisor. The HDR Admissions Officer may ask you for further information to assist with your enquiry. The information will be passed onto the nominated (or relevant) school or supervisor.

Faculty Research Contact

Email: sef.research@qut.edu.au

Telephone: +61 7 3138 4783

Level 4, O Podium Gardens Point, George St, QLD 4000

Application Submission

You can submit an application using the <u>FR Form</u>. Applications can be emailed to QUT Admissions

(<u>qut.intadmission@qut.edu.au</u>).

Applications must include all supporting documentations including your detailed research proposal.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Course Information and Notes

Please consult notes for BN71 Master of Applied Science for course information and requirements.

Further Information

Science and Engineering Research, Phone: +61 7 3138 2595, Email: sef.research@qut.edu.au



| Year | 2018 |
|--|--|
| QUT code | IF80 |
| CRICOS | 095410G |
| Duration (full-time domestic) | 1.5 - 2 years |
| Duration (full-time international) | 2 years |
| Duration (part-time domestic) | 4 years |
| Campus | Gardens Point, Kelvin Grove |
| Domestic fee (indicative) | 2018: \$22,400 - \$30,400 per year full time if you exceed the maximum time under RTP |
| International fee (indicative) | 2018: \$28,300 - \$33,800 per year full time |
| Total credit points | 144 |
| Start months | December, November, October, September, August, July, June, May, April, March, February, January |
| Int. Start Months | December, November, October, September, August, July, June, May, April, March, February, January |
| Course Coordinator | |
| Discipline Coordinator | |

Domestic Entry requirements

To be eligible for this course, you need either:

- a completed recognised bachelor honours degree in a discipline relevant to your intended area of study or
- a completed recognised bachelor degree or equivalent in a discipline relevant to your intended area of study with: a minimum grade point average (GPA) score of 5.00 (on QUT's 7 point scale)relevant professional and/or research experience (as determined by the faculty).

Applications and proposed research projects are subject to supervisor availability and resources available within the faculty.

International Entry requirements

To be eligible for this course, you need either:

- a completed recognised bachelor honours degree in a discipline relevant to your intended area of study or
- a completed recognised bachelor degree or equivalent in a discipline relevant to your intended area of study with: a minimum grade point average (GPA) score of 5.00 (on QUT's 7 point scale)relevant professional and/or research experience (as determined by the faculty).

Applications and proposed research projects are subject to supervisor availability and resources available within the faculty.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|--|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Domestic Course structure Mandatory units

You'll need to complete:

- a time-based thesis
- IFN001 Advanced Information

Research Skills.

You may need to complete other units that are recommended by your faculty, negotiated with you and based on the skills gaps identified in your research degree skills audit.

Study areas

Your faculty may have several specialisations (study areas) that your research will align with. This will appear on your testamur at graduation:

Business

- Master of Philosophy (Accountancy)
- Master of Philosophy (Advertising)
- Master of Philosophy (Economics)
- Master of Philosophy (Entrepreneurship and Innovation)
- Master of Philosophy (Finance)
- Master of Philosophy (Human Resource Management)
- Master of Philosophy (International Business)
- Master of Philosophy (Management)
- Master of Philosophy (Marketing)
- Master of Philosophy (Philanthropy and Nonprofit Studies)
- Master of Philosophy (Public Relations)

Creative Industries

- Master of Philosophy (Design)
- Master of Philosophy (Communication)
- Master of Philosophy (Creative Practice)

Education

Master of Philosophy (Education)

Health

- Master of Philosophy (Biomedical Sciences)
- Master of Philosophy (Exercise Sciences)
- Master of Philosophy (Nursing)
- Master of Philosophy (Nutrition and Dietetics)
- Master of Philosophy (Optometry)
- Master of Philosophy (Paramedicine)
- Master of Philosophy (Pharmacy)
- Master of Philosophy (Physical
- Education) Master of Philosophy (Podiatry)
- Master of Philosophy (Public
- Health)
- Master of Philosophy (Psychology)
- Master of Philosophy (Radiology)
- Master of Philosophy (Social Work)

Law

- Master of Philosophy (Law)
- Master of Philosophy (Justice)



Master of Philosophy

Science and Engineering

- Master of Philosophy (Engineering)
- Master of Philosophy (Information Technology)
- Master of Philosophy (Mathematics)
- Master of Philosophy (Science)
- Master of Philosophy (Urban Development)

International Course structure

Mandatory units

You'll need to complete:

- a time-based thesis
 - IFN001 Advanced Information Research Skills.

You may need to complete other units that are recommended by your faculty, negotiated with you and based on the skills gaps identified in your research degree skills audit.

Study areas

Your faculty may have several specialisations (study areas) that your research will align with. This will appear on your testamur at graduation:

Business

- Master of Philosophy (Accountancy)
- Master of Philosophy (Advertising)
- Master of Philosophy (Economics)
- Master of Philosophy
- (Entrepreneurship and Innovation)
- Master of Philosophy (Finance)Master of Philosophy (Human
- Master of Philosophy (Huma Resource Management)
- Master of Philosophy (International Business)
- Master of Philosophy (Management)
- Master of Philosophy (Marketing)
- Master of Philosophy (Philanthropy and Nonprofit Studies)
- Master of Philosophy (Public Relations)

Creative Industries

- Master of Philosophy (Design)
- Master of Philosophy
- (Communication)
- Master of Philosophy (Creative Practice)

Education

Master of Philosophy (Education)

Health

- Master of Philosophy (Biomedical Sciences)
- Master of Philosophy (Exercise Sciences)
- Master of Philosophy (Nursing)
- Master of Philosophy (Nutrition and Dietetics)
- Master of Philosophy (Optometry)
- Master of Philosophy
- (Paramedicine)Master of Philosophy (Pharmacy)

- Master of Philosophy (Physical Education)
- Master of Philosophy (Podiatry)
- Master of Philosophy (Public Health)
- Master of Philosophy (Psychology)
- Master of Philosophy (Radiology)
- Master of Philosophy (Social Work)

Law

- Master of Philosophy (Law)
- Master of Philosophy (Justice)

Science and Engineering

- Master of Philosophy (Engineering)
- Master of Philosophy (Information Technology)
- Master of Philosophy (Mathematics)
- Master of Philosophy (Science)
 Master of Philosophy (Urban Development)



| Year | 2018 |
|-------------------------------------|--|
| QUT code | IT60 |
| CRICOS | 020309B |
| Duration (full-time) | 1.5 years |
| Duration (part-time domestic) | 3 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$24,300 per year full-time if you exceed the maximum time under RTP (96 credit points) |
| International fee (indicative) | 2018: \$28,100 per year full-time (96 credit points) |
| Total credit points | 144 |
| Start months | At any time |
| Int. Start Months | Entry is available at any time subject to approval |
| Course Coordinator | Professor Richi Nayak. Enquiries to sef.research@qut.edu.au or 07 3138 2595. |
| Discipline Coordinator | Science and Engineering Faculty 3138 2595 sef.research@qut.edu.au |

Domestic Entry requirements Academic entry requirements

A completed recognised bachelor honours degree including a major relevant to the intended area of study; *or*

A completed recognised four year bachelor degree (or equivalent) including a major relevant to the intended area of study with a minimum grade point average (GPA) score of 5.0 (on QUT's 7 point scale) *and* relevant professional and/ or research experience as determined by Faculty.

Research proposals must be submitted with your application. Proposed research projects are subject to supervisor availability and resources available within the faculty to support the proposed research topic.

Application guide

Applicants are asked to nominate a supervisor and topic when submitting a formal application. An application is likely to be more successful where a supervisor and topic are well matched.

Applicants should ensure that there is a genuine fit with the potential supervisor's research interests by looking at the interests of the researchers within the relevant school as described on the <u>QUT</u> <u>Science and Engineering Faculty</u> website. Applicants are encouraged to contact the postgraduate research enquiries team for assistance at (<u>sef.research@qut.edu.au</u>)

This contact should include a transcript of academic records, the topic area which you wish to study, the school in which you wish to undertake your research, and if known, the name of a potential supervisor. The HDR Admissions Officer may ask you for further information to assist with your enquiry. The information will be passed onto the nominated (or relevant) school or supervisor.

Faculty research contact

Email: sef.research@qut.edu.au

Telephone: +61 7 3138 4783

Level 4, O Podium Gardens Point Campus, George St, QLD 4000

Application submission

You can submit an <u>online application</u> or hardcopy using the <u>PR Form</u>. Hardcopy applications can be emailed to the QUT HDR Admissions Office at

(research.enquiries@qut.edu.au).

Applications must include all supporting documentations including your detailed research proposal.

International Entry requirements

Academic entry requirements

A completed recognised bachelor honours degree including a major relevant to the intended area of study; *or*

A completed recognised bachelor degree (or equivalent) including a major relevant to the intended area of study with a minimum grade point average (GPA) score of 5.0 (on QUT's 7 point scale) and relevant professional and/ or research experience as determined by Faculty.

Research proposals must be submitted with your application. Proposed research projects are subject to supervisor availability and resources available within the faculty to support the proposed research topic.

Application guide

Applicants are asked to nominate a supervisor and topic when submitting a formal application. An application is likely to be more successful where a supervisor and topic are well matched.

Applicants should ensure that there is a genuine fit with the potential supervisor's research interests by looking at the interests of the researchers within the relevant school as described on the QUT <u>Science and Engineering Faculty website</u>. Applicants are encouraged to contact the postgraduate research enquiries team for assistance at (sef.research@qut.edu.au)

This contact should include a transcript of academic records, the topic area which you wish to study, the school in which you wish to undertake your research, and if known, the name of a potential supervisor. The HDR Admissions Officer may ask you for further information to assist with your enquiry. The information will be passed onto the nominated (or relevant) school or supervisor.

Faculty research contact

Email: sef.research@qut.edu.au

Telephone: +61 7 3138 4783

Level 4, O Podium Gardens Point Campus, George St, QLD 4000

Application submission

You can submit an application using the FR Form. Applications can be emailed to QUT Admissions

(qut.intadmission@qut.edu.au).

Applications must include all supporting documentations including your detailed research proposal.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Research Areas

Areas of research interest and contact details can be obtained from <u>the Faculty</u> website

Course Structure

Students entering the degree with second-class honours division A (or better) in an IT-related course will often complete the degree in one year full-time. The length of the program is generally expected to be 18 months full-time (including six months of provisional registration) or three years part-time (including one year of provisional registration).

Assessment for this research masters is based on a program of supervised research and investigation, culminating in a thesis.

Programs may include some coursework in support of the conduct of research and preparation of a thesis. Candidates are required to have regular, face-to-face interaction with supervisors and to participate in University scholarly activities such as research seminars, teaching and publication.

Further Information

Science and Engineering Research, Phone: +61 7 3138 2595, Email: sef.research@qut.edu.au

Domestic Course structure

Students entering the degree with second-class honours division A (or better) in an IT-related course will often complete the degree in one year full-time. The length of the program is generally expected to be 18 months full-time (including six months of provisional registration) or three years part-time (including one year of provisional registration).

Assessment for this research masters is based on a program of supervised research and investigation, culminating in a thesis.

Programs may include some coursework in support of the conduct of research and preparation of a thesis. Candidates are required to have regular, face-to-face interaction with supervisors and to participate in university scholarly activities such as research seminars, teaching and publication.

Getting started Choose a topic

Step 1: Identify your research area:

- Chemistry, physics and mechanical
- <u>engineering</u>
 <u>Civil engineering and the built</u> environment
- Earth, environmental and biological sciences
- Electrical engineering and computer science
- Information systems
- <u>Mathematical sciences</u>

Step 2 Choose a theme from:

- Food
 - Energy
 - Health
 - Environment
 - Security
 - Information

Step 3 Contact Science and Engineering's <u>research degree</u> <u>coordinator</u>.

QUT researchers are available to discuss your topic with you to ensure it has the right scope and scale for your preferred research degree. There are also opportunities for you to align your interests with QUT's major ongoing research programs. Explore <u>research</u> <u>topics</u>

Find a supervisor

Connecting with a supervisor for your project is of vital importance. Finding a supervisor

International Course structure

Students entering the degree with second-class honours division A (or better) in an IT-related course will often complete the degree in one year full-time. The length of the program is generally expected to be 18 months full-time (including six months of provisional registration) or three years part-time (including one year of provisional registration).

Assessment for this research masters is based on a program of supervised research and investigation, culminating in a thesis.

Programs may include some coursework in support of the conduct of research and preparation of a thesis. Candidates are required to have regular, face-to-face interaction with supervisors and to participate in University scholarly activities such as research seminars, teaching and publication.

Sample Structure

Code Title

Full-time Course Structure

A program of research and investigation developed in conjunction with the Principal

Supervisor and approved by the Faculty Research Committee (Workload equivalent to 48 credit points per semester)

Part-time Course Structure

A program of research and investigation developed in conjunction with the Principal

Supervisor and approved by the Faculty Research Committee (Workload equivalent to 24 credit points per semester)



| Year | 2018 |
|-------------------------------------|--|
| QUT code | SC80 |
| CRICOS | 007897G |
| Duration (full-time) | 2 years |
| Duration (part-time domestic) | 4 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$28,700 per year full-time if you exceed the maximum time under RTP (96 credit points) |
| International fee (indicative) | 2018: \$32,300 per year full-time (96 credit points) |
| Total credit points | 144 |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | December, November, October, September, August, July, June, May, April, March, February, January |
| Int. Start Months | December, November, October, September, August, July, June, May, April, March, February, January |
| Course Coordinator | Prof Christine Bruce (APD) |
| Discipline Coordinator | Science and Engineering Faculty 3138 2595 sef.research@qut.edu.au |

Domestic Entry requirements Academic entry requirements

- A completed recognised bachelor honours degree including a major relevant to the intended area of study; or
- A completed recognised bachelor degree (or equivalent) including a major relevant to the intended area of study with a minimum grade point average (GPA) score of 5.0 (on QUT's 7 point scale) and relevant professional and/ or research experience as determined by Faculty.

Research proposals must be submitted with your application. Proposed research projects are subject to supervisor availability and resources available within the faculty to support the proposed research topic.

Application Guide

Applicants are asked to nominate a supervisor and topic when submitting a formal application. An application is likely to be more successful where a supervisor and topic are well matched.

Applicants should ensure that there is a genuine fit with the potential supervisor's research interests by looking at the interests of the researchers within the relevant school as described on the QUT Science and Engineering Faculty website. Applicants are encouraged to contact the postgraduate research enquiries team for assistance at (sef.research@qut.edu.au)

This contact should include a transcript of academic records, the topic area which you wish to study, the school in which you wish to undertake your research, and if known, the name of a potential supervisor. The HDR Admissions Officer may ask you for further information to assist with your enquiry. The information will be passed onto the nominated (or relevant) school or supervisor.

Faculty Research Contact

Email: sef.research@qut.edu.au

Telephone: +61 7 3138 4783

Level 4, O Podium Gardens Point Campus, George St, QLD 4000

Application Submission

You can submit an <u>online application</u> or hardcopy using the <u>PR Form</u>. Hardcopy

applications can be emailed to the QUT HDR Admissions Office at

(research.enquiries@qut.edu.au). Applications must include all supporting documentations including your detailed research proposal.

International Entry requirements

Academic entry requirements

- A completed recognised bachelor honours degree including a major relevant to the intended area of study; or
- A completed recognised bachelor degree (or equivalent) including a major relevant to the intended area of study with a minimum grade point average (GPA) score of 5.0 (on QUT's 7 point scale) and relevant professional and/ or research experience as determined by Faculty.

Research proposals must be submitted with your application. Proposed research projects are subject to supervisor availability and resources available within the faculty to support the proposed research topic.

Application Guide

Applicants are asked to nominate a supervisor and topic when submitting a formal application. An application is likely to be more successful where a supervisor and topic are well matched.

Applicants should ensure that there is a genuine fit with the potential supervisor's research interests by looking at the interests of the researchers within the relevant school as described on the QUT <u>Science and Engineering Faculty website</u>. Applicants are encouraged to contact the postgraduate research enquiries team for assistance at (sef.research@qut.edu.au)

This contact should include a transcript of academic records, the topic area which you wish to study, the school in which you wish to undertake your research, and if known, the name of a potential supervisor. The HDR Admissions Officer may ask you for further information to assist with your enquiry. The information will be passed onto the nominated (or relevant) school or supervisor.

Faculty Research Contact

Email: sef.research@qut.edu.au

Telephone: +61 7 3138 4783

Level 4, O Podium Gardens Point Campus, George St, QLD 4000

Application Submission

You can submit an application using the $\frac{FR Form}{P}$. Applications can be emailed to QUT Admissions

(<u>qut.intadmission@qut.edu.au</u>). Applications must include all supporting documentations including your detailed research proposal.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | | |
|--|-----|--|
| Overall | 6.5 | |
| Listening | 6.0 | |
| Reading | 6.0 | |
| Writing | 6.0 | |
| Speaking | 6.0 | |

Course Design

This degree consists of coursework that can comprise up to one-third of the course and research, which must be at least two-thirds of the course. The assessed coursework may be in the form of advanced lectures, seminars, reading courses or independent study designed to focus on information retrieval skills. The research component is a program of supervised research and investigation at a level of scientific competence significantly higher than that expected from an undergraduate degree and, typically, a masters thesis does not need to be as substantial as a Doctor of Philosophy thesis.

Students undertake a program of research and investigation on a topic approved by the Academic Board. All projects should be sponsored either by outside agencies such as industry, government authorities, or professional organisations, or by the University itself.

Students entering the course with an honours degree or equivalent substantial relevant work experience normally gain exemptions to a maximum of 96 credit points at the discretion of the Academic Board on the recommendation of the Head of School.

Students entering the course with a graduate diploma may gain exemption to a maximum of 96 credit points at the discretion of the Academic Board on the

recommendation of the Head of School.

A full-time candidate who does not hold an honours degree appropriate to the course of study will normally be required to complete both course and research work, including submission of the thesis for examination during a period of registration of 24 months. The corresponding period in the case of a part-time candidate shall be 48 months. In special cases the Academic Board may approve a shorter period.

A holder of an honours degree or its equivalent appropriate to the course of study may submit the thesis for examination after not less than 12 months of registration if a full-time student, or 24 months if a part-time student. In special cases the Academic Board may approve a shorter period.

Overview

The objectives of this course are to:

Sample Structure

| Code | Title |
|-----------|--------------------------------------|
| Unit List | |
| PCN701 | Topics in Advanced Chemistry 1 |
| PCN801 | Topics in Advanced Chemistry 2 |

| Code | Title |
|--|--|
| Unit List | |
| Essential units: | |
| NRN100 | Readings in Natural Resource Sciences 1 |
| NRN102 | Confirmation of Candidature Seminar |
| NRN103 | Final Seminar |
| Select up to one of the following units if required: | |
| NRN101 | Readings in Natural Resource Sciences 2 |
| NRN104 | Advanced Topics in Natural Resource Sciences 1 |
| NRN105 | Advanced Topics in Natural Resource Sciences 2 |

Code

Course Notes

Selections from other School programs, such as MA75 Graduate Diploma in Mathematical Science and MA85 Master of Mathematical Science, to a maximum of 60 credit points

Title



CUT Doctor of Philosophy

Handbook

| Year | 2018 |
|--|--|
| QUT code | IF49 |
| CRICOS | 006367J |
| Duration (full-time domestic) | 3 - 4 years |
| Duration (full-time international) | 4 years |
| Campus | Kelvin Grove |
| Domestic fee (indicative) | 2018: \$24,800 - \$30,800 per year full-time if you exceed the maximum time under RTP (96 credit points) |
| International fee (indicative) | 2018: \$28,000 - \$34,000 per year full-time (96 credit points) |
| Total credit points | |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | December, November, October, September, August, July, June, May, April, March, February, January |
| Int. Start Months | December, November, October, September, August, July, June, May, April, March, February, January |

Minimum English

requirements Students must meet the English proficiency requirements.



| Year | 2018 |
|--|--|
| QUT code | IF49 |
| CRICOS | 006367J |
| Duration (full-time domestic) | 3 - 4 years |
| Duration (full-time international) | 4 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$24,800 - \$30,800 per year full-time if you exceed the maximum time under RTP (96 credit points) |
| International fee (indicative) | 2018: \$28,000 - \$34,000 per year full-time (96 credit points) |
| Total credit points | |
| Credit points full-time sem. | 48 |
| Credit points part-time sem. | 24 |
| Start months | December, November, October, September, August, July, June, May, April, March, February, January |
| Int. Start Months | December, November, October, September, August, July, June, May, April, March, February, January |
| Discipline Coordinator | Science and Engineering Faculty 3138 2595 sef.research@qut.edu.au |

Domestic Entry requirements Academic entry requirements

You must have either:

- a completed recognised relevant <u>honours degree or equivalent;</u> or
- a completed recognised masters degree or professional doctorate (by research or coursework)

Masters and professional doctorate degrees by coursework must have a significant research component, normally not less than 25%. Holders of masters and professional doctorate by coursework must:

- have a minimum grade point average (GPA) score of 5.0 on QUT's 7 point scale; and
- present evidence of research experience and potential for approval

Admission to the Doctor of Philosophy depends on an applicant's demonstrated research aptitude and the availability of supervision, infrastructure and resources needed for the proposed research project.

For more information on eligibility, read the <u>admission criteria for the Doctor of</u> <u>Philosophy (PDF, 98.5KB)</u>.

International Entry requirements Academic entry requirements

You must have either:

- a completed recognised relevant honours degree or equivalent; or
- a completed recognised masters degree or professional doctorate (by research or coursework)

Masters and professional doctorate degrees by coursework must have a significant research component, normally not less than 25%. Holders of masters and professional doctorate by coursework must:

- have a minimum grade point average (GPA) score of 5.0 on QUT's 7 point scale; and
- present evidence of research experience and potential for approval

Admission to the Doctor of Philosophy depends on an applicant's demonstrated research aptitude and the availability of supervision, infrastructure and resources needed for the proposed research project.

For more information on eligibility, read the <u>admission criteria for the Doctor of</u> <u>Philosophy (PDF, 98.5KB)</u>.

Minimum English requirements

Students must meet the English proficiency requirements.

| IELTS (International English Language Testing System) | |
|---|-----|
| Overall | 6.5 |
| Listening | 6.0 |
| Reading | 6.0 |
| Writing | 6.0 |
| Speaking | 6.0 |

Overview

The Doctor of Philosophy (PhD) offers the opportunity to work with an experienced supervisory research team to make a significant and original contribution to disciplinary knowledge. A PhD candidate's research must reveal high critical ability and powers of imagination and synthesis and may be, depending on discipline, demonstrated in the form of new knowledge or significant and original adaptation, application and interpretation of existing knowledge. This world-class program provides a basis for critical inquiry and welcomes collaborative and interdisciplinary research projects. A QUT PhD graduate will be equipped to seek employment in industry, research organisations and universities.

Entry requirements

Admission to the Doctor of Philosophy depends on an applicant's demonstrated research aptitude and the availability of supervision, infrastructure and resources needed for the proposed research project.

An applicant would normally hold: . a relevant first or second class division A honours degree or equivalent, or . an appropriate Masters degree or Professional Doctorate (by research or coursework)

Masters and Professional Doctorates degrees by coursework must contain a significant research component, normally no less than 25%.

Holders of Masters and Professional Doctoral by Coursework must:
have a grade point average of at least 5.0 on a 7 point scale and
present evidence of research experience and potential for approval

International Student Entry

Admission to the Doctor of Philosophy depends on an applicant's demonstrated



Doctor of Philosophy (Hosted by Science & Engineering Faculty)

research aptitude and the availability of supervision, infrastructure and resources needed for the proposed research project.

An applicant would normally hold: . a relevant first or second class division A honours degree or equivalent, or . an appropriate Masters degree or Professional Doctorate (by research or coursework)

Masters and Professional Doctorates degrees by coursework must contain a significant research component, normally no less than 25%.

Holders of Masters and Professional Doctoral by Coursework must:
have a grade point average of at least 5.0 on a 7 point scale and
present evidence of research experience and potential for approval

English language proficiency requires International applicants to meet an IELTS overall bandscore of 6.5 with no subscore below 6.0.

FINANCIAL GUARANTEE

Acceptable forms of evidence include: - A letter from an approved employer confirming the continuation of your salary; OR

- A signed Scholarship Agreement between QUT and your sponsoring agency; OR

 An accepted letter of offer from QUT for a postgraduate research scholarship; OR
 An approved external scholarship.

Location & duration

The expected duration of the Doctor of Philosophy is three to four years full-time, or six to eight years part-time. Full-time study is normally conducted on-campus at QUT. Part-time and external study options may be available depending on the project, infrastructure requirements and funding arrangements. Although QUT offers this flexibility, candidates must meet minimum attendance requirements and the university must be satisfied that adequate supervision and resources are available.

International student visas require oncampus study to be completed full-time.

Course Structure

QUT adopts a project management approach. PhD candidates work closely with their supervisory team to meet collegially reviewed milestones leading to timely submission of a thesis for examination. QUT is proud of its record of timely completions and low attrition rates realised by this approach. During candidature the supervisor and other key stakeholders will provide advice and direction to the candidate to encourage their participation in university scholarly activities such as research seminars, teaching and publication. The length of the thesis varies according to the topic, but should normally be no longer than 100,000 words, excluding bibliography.

Fees

Australian citizens and permanent residents will be awarded a Research Training Scheme (RTS) place. Domestic students are not required to apply for an RTS entitlement, as it will be automatically allocated. The RTS covers tuition fees but not other study related costs. PhD Students are entitled to four years full-time equivalent study under these schemes. Students who exceed this entitlement may apply to QUT for extension, however the University may charge fees for the period of the program, which exceeds the student's entitlement. The University determines the fee level for domestic and international students.

Further Information

For further information about this course, please contact: Research Students Centre Phone: +61 7 3138 4475, Email: research.enrolment@qut.edu.au

Science and Engineering Faculty Professor Chris Langton Assistant Dean - Research Phone: +61 7 3138 2595 Email: sef.research@qut.edu.au

Domestic Course structure Course design

Mandatory

- IFN001 Advanced Information
- **Retrieval Skills**
- Time based Thesis

Other units as agreed by student in negotiation with their supervisor and faculty.

International Course structure

Course design

Mandatory

- IFN001 Advanced Information Retrieval Skills
- Time based Thesis

Other units as agreed by student in negotiation with their supervisor and faculty.



QUT

Doctor of Information Technology

Handbook

| Year | 2018 |
|-------------------------------------|--|
| QUT code | IT81 |
| CRICOS | 063035A |
| Duration (full-time) | 3 years |
| Duration (part-time domestic) | 6 years |
| Campus | Gardens Point |
| Domestic fee (indicative) | 2018: \$21,800 per year full-time if you exceed the maximum time under RTP (96 credit points) |
| International fee (indicative) | 2018: \$28,500 per year full-time (96 credit points) |
| Total credit points | 288 |
| Start months | November, July, February |
| Int. Start Months | November, July, February |
| Course Coordinator | Associate Professor Richi Nayak; email: sef.research@qut.edu.au; ph: 3138 2595 |
| Discipline Coordinator | |

Domestic Entry requirements Academic entry requirements

Applicants must have industry experience in a field relevant to the professional doctorate and possess one of the following:

- a four-year degree or its equivalent with First Class or Second Class Honours Division A; or
- a masters degree; or
 a three-year bachelor degree and relevant industry experience; or
- an equivalent combination of relevant experience and/or education and training.

Students with exemplary professional practice and who do not meet one of the above criteria may still be eligible to apply and should consult QUT's Science and Engineering Faculty.

Before submitting an application for enrolment, potential candidates should consult the course coordinator for assistance with preparation of the appropriate application form concerning eligibility and special interests.

International Entry requirements

Academic entry requirements

Applicants must have industry experience in a field relevant to the professional doctorate and possess one of the following:

- a four-year degree or its equivalent with First Class or Second Class Honours Division A; or
- a masters degree; or
- a three-year bachelor degree and relevant industry experience; or
- an equivalent combination of relevant experience and/or education and training.

Students with exemplary professional practice and who do not meet one of the above criteria may still be eligible to apply and should consult QUT's Science and Engineering Faculty.

Before submitting an application for enrolment, potential candidates should consult the course coordinator for assistance with preparation of the appropriate application form concerning eligibility and special interests.

Minimum English requirements

Students must meet the English proficiency requirements.

IELTS (International English Language
Testing System)Overall6.5Listening6.0Reading6.0Writing6.0Speaking6.0

Course Structure

The degree consists of 288 credit points of which up to 96 credit points are coursework, and the balance is research. Students are expected to develop a high level of research skill and analysis and make an original contribution to knowledge and professional practice. The Doctor of Information Technology will provide focused research and coursework studies in the IT's research areas.

Research Area

Areas of research interest and contact details can be obtained from the Faculty website.

Further Information

For further information about this course, please contact:

Associate Professor Richi Nayak Phone: +61 7 3138 2595 Email: sef.research@qut.edu.au

Domestic Course structure

The degree consists of 288 credit points— up to 96 credit points of coursework, and the balance is research. Students are expected to develop a high level of research skill and analysis and make an original contribution to knowledge and professional practice. The Doctor of Information Technology will provide focused research and coursework studies in the IT's research areas.

International Course structure

The degree consists of 288 credit points of which up to 96 credit points are coursework, and the balance is research. Students are expected to develop a high level of research skill and analysis and make an original contribution to knowledge and professional practice. The Doctor of Information Technology will provide focused research and coursework studies in the IT's research areas.

Sample Structure

Semesters

- <u>Notes</u>
- Year 1, Semester 1
- Year 1, Semester 2
- Year 2 to Year 3
- <u>Computer Science</u>
 Information Systems

Code Title

Notes

This is an indicative course structure only. Students should discuss their program with the Course Coordinator.

Year 1, Semester 1

PG coursework elective unit

PG coursework elective unit

PG coursework elective unit IFN665 Advanced Topic 1

Allows you an opportunity to extend your knowledge in related fields, improve your understanding of project management, develop venture capital, leadership competencies or to lead research groups.

Coursework should normally be completed within the first year, subject to unit availability. Variations to this would be made in consultation with your supervisory team.

Year 1, Semester 2

INN700 Introduction to Research

A literature review of the related theory.

IFN701 Project 1

A literature review of the relevant reseach methods and approaches that may be of use.

INN701 Advanced Research Topics

A pilot study of the selected theory and method to a subset of the problem in order to test the efficacy of the methods and theories selected.

Students construct an integrated research proposal.

| Year 2 to Year 3 | |
|---------------------|--|
| Computer Science | |
| IFT821 Thesis | |
| Information Systems | |
| IFT822 Thesis | |



Second Major: Criminology and Policing

| Handbook | |
|---------------------------|---|
| Year | 2018 |
| QUT code | Uniwide |
| Total credit points | 72 |
| Discipline Coordinator | 3138 2707 lawandjustice@qut.edu.a u |

Minimum English

requirements Students must meet the English proficiency requirements.



This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?course?code=Uniwide&courseID=33626. CRICOS No.00213J

Second Major: Creative Industries

| Handbook | |
|---------------------------|---|
| Year | 2018 |
| QUT code | Uniwide |
| Total credit points | 96 |
| Discipline Coordinator | Phone: +61 7 3138 2000 Email: askqut@qut.edu.au |

Minimum English

requirements Students must meet the English proficiency requirements.



Second Major: Design

Phone: +61 7 3138 2000 Email: askqut@qut.edu.au

Uniwide

96

| Handbook | | |
|----------|------|--|
| | | |
| Year | 2018 | |

QUT code

Total credit points

Discipline Coordinator

Minimum English

requirements Students must meet the English proficiency requirements.



Second Major: Policy and Governance

| Напороок | |
|---------------------------|---|
| Year | 2018 |
| QUT code | Uniwide |
| Total credit points | 72 or 96 |
| Discipline Coordinator | 3138 2707 lawandjustice@qut.edu.a u |

Minimum English

requirements Students must meet the English proficiency requirements.



This information is correct as at 10/12/2018. For the most up-to-date course information, visit https://www.student.qut.edu.au/enrolment/courses/course?course?code=Uniwide&courseID=33635. CRICOS No.00213J

Second Major: Property Economics

| Year | 2018 |
|---------------------------|--|
| QUT code | Uniwide |
| Total credit points | 96 |
| Discipline Coordinator | 07 3138 8822 sef.enquiry@qut.edu.au |

Minimum English

requirements Students must meet the English proficiency requirements.



Second Major: Urban Development

| Handbook | |
|---------------------------|--|
| Year | 2018 |
| QUT code | Uniwide |
| Total credit points | 96 |
| Discipline Coordinator | 07 3138 8822 sef.enquiry@qut.edu.au |

Minimum English

requirements Students must meet the English proficiency requirements.

