

Handbook

Year	2013
QUT code	IT10
CRICOS	025283M
Duration (full-time international)	
OP	14
Rank	70
International fee (indicative)	2013: \$8,436 per Semester
Total credit points	96
Credit points full-time sem.	48
Course Coordinator	Elizabeth McDade
Discipline Coordinator	

International Entry requirements

To be accepted into the program you must have successfully completed senior high school with the required grades. You must also have relevant vocational experience.

International Subject prerequisites

- English

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)	
speaking	5.0
writing	5.0
reading	5.0
listening	5.0
overall	5.5

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.

International Course structure

University Diploma in Information Technology units

- Databases
- Building IT Systems
- Emerging Technology
- Industry Insights
- Programming
- Networks
- Professional Communication 1
- Professional Communication 2

Extension English Sessions

For first-semester students, these sessions take place during weeks two to eight. Other QUTIC students in University Entry Programs may join the sessions, if their timetable permits. The aims of Extension English are to improve the student's English language proficiency in speaking, listening and overall writing ability in a relaxed environment.

In addition to developing these language skills, students have the opportunity to discuss cultural issues and ask questions about studying at university.

Handbook

Year	2013
QUT code	CE44
CRICOS	037544G
Duration (full-time)	4 years
Rank	80
OP Guarantee	Yes
Campus	Gardens Point
Total credit points	384
Credit points full-time sem.	48
Course Coordinator	Professor Chris Eves
Discipline Coordinator	Dr Fiona Cheung sef.enquiry@qut.edu.au

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Special Note

This course has been discontinued. Any remaining students should seek advice from the Course Coordinator regarding their remaining course program.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Handbook

Year	2013
QUT code	CN51
CRICOS	006363B
Duration (full-time)	4 years
Rank	75
OP Guarantee	Yes
Campus	Gardens Point
Total credit points	384
Credit points full-time sem.	48
Course Coordinator	Professor Chris Eves
Discipline Coordinator	Dr Fiona Cheung sef.enquiry@qut.edu.au

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Special Note

This course has been discontinued. Any remaining students should seek advice from the Course Coordinator regarding their remaining course program.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Handbook

Year	2013
QUT code	EE41
CRICOS	003490G
Duration (full-time)	4 years
Rank	80
OP Guarantee	Yes
Campus	Gardens Point
Total credit points	384
Credit points full-time sem.	48
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Dr Bouchra Senadji

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Special Note

This course has been discontinued. Any remaining students should seek advice from the Course Coordinator regarding their remaining course program.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	Refer to majors
International fee (indicative)	Refer to majors
Total credit points	384
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr R.Mahalinga-Iyer

Domestic Assumed knowledge

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

- Maths B
- English

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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	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.

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).

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Sample Structure

Code	Title
Year 1 - Semester 1	
ENB100	Engineering and Sustainability
ENB110	Engineering Statics and Materials
ENB130	Mechanical and Thermal Energy
MAB125	Foundations of Engineering Mathematics
OR	
MAB126	Mathematics for Engineering 1
Year 1 - Semester 2	
ENB120	Electrical Energy and Measurements
ENB150	Introducing Engineering Design
ENB200	Introducing Engineering Systems
MAB126	Mathematics for Engineering 1
OR	
MAB127	Mathematics for Engineering 2

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Dr Jason Ford

Domestic Assumed knowledge

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

- Maths B
- English

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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.0

Professional Recognition

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

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).

Further Information

Science and Engineering Faculty - Phone

+61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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 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 - Semester 1	
ENB100	Engineering and Sustainability
ENB110	Engineering Statics and Materials
ENB130	Mechanical and Thermal Energy
MAB125	Foundations of Engineering Mathematics
OR	
MAB126	Mathematics for Engineering 1
Year 1 - Semester 2	
ENB120	Electrical Energy and Measurements
ENB150	Introducing Engineering Design
ENB200	Introducing Engineering Systems
MAB126	Mathematics for Engineering 1
OR	
MAB127	Mathematics for Engineering 2
Year 2 - Semester 1	
ENB240	Introduction To Electronics
ENB246	Engineering Problem Solving
ENB250	Electrical Circuits
MAB127	Mathematics for Engineering 2
OR	
MAB233	Engineering Mathematics 3
Year 2 - Semester 2	
ENB121	Aerodynamics
ENB242	Introduction To Telecommunications
ENB243	Linear Circuits and Systems
ENB244	Microprocessors and Digital Systems
Year 3 - Semester 1	
ENB241	Software Systems Design
ENB342	Signals, Systems and Transforms
ENB348	Aircraft Systems and Flight Control
ENB354	Introduction To Systems Design
Year 3 - Semester 2	
ENB343	Fields, Transmission and Propagation
ENB347	Modern Flight Control Systems
ENB355	Advanced Systems Design
MAB233	Engineering Mathematics 3
OR	
Selective	
Year 4 - Semester 1	
BEB801	Project 1
ENB346	Digital Communications
ENB440	RF Techniques and Modern Applications
ENB451	Aerospace Radio and Radar Systems
Year 4 - Semester 2	
BEB701	Work Integrated Learning 1
BEB802	Project 2
ENB357	Spacecraft Dynamics and Control
ENB447	Navigation Systems For Aircraft

Aerospace Avionics Selectives	
ENB344	Industrial Electronics
ENB441	Applied Image Processing
ENB448	Signal Processing and Filtering
ENB457	Controls, Systems and Applications
INB270	Programming

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Prof Manicka Dhanasekar

Domestic Assumed knowledge

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

- Maths B
- English

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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	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 undertake 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 [University Wide Minors](#))

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).

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sf.enquiry@qut.edu.au

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

Bachelor of Engineering (Civil and Construction)

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 undertake 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 undertake 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.

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](#)
- [Civil and Construction Engineering Selectives](#)

Code	Title
Year 1 - Semester 1	
ENB100	Engineering and Sustainability
ENB110	Engineering Statics and Materials
ENB130	Mechanical and Thermal Energy
MAB125	Foundations of Engineering Mathematics
OR	
MAB126	Mathematics for Engineering 1
Year 1 - Semester 2	
ENB120	Electrical Energy and Measurements
ENB150	Introducing Engineering Design
ENB200	Introducing Engineering Systems
MAB126	Mathematics for Engineering 1
OR	
MAB127	Mathematics for Engineering 2
Year 2 - Semester 1	
ENB270	Engineering Mechanics of Materials
ENB272	Geotechnical Engineering 1
ENB273	Civil Materials
MAB233	Engineering Mathematics 3
Year 2 - Semester 2	
ENB275	Project Engineering 1
ENB276	Structural Engineering 1
ENB280	Hydraulic Engineering
UDB214	Professional Studies 2
Year 3 - Semester 1	
ENB277	Construction Engineering Law
ENB375	Structural Engineering 2
ENB381	Civil Engineering Construction
UDB312	Contract Administration
Year 3 - Semester 2	
ENB371	Geotechnical Engineering 2
ENB373	Design and Construction of Steel Structures
ENB382	Estimating in Engineering Construction
Second Major/Minor unit	
Year 4 - Semester 1	
BEB801	Project 1

Bachelor of Engineering (Civil and Construction)

ENB471	Design of Concrete Structures and Foundations
Second Major/Minor unit	
Second Major/Minor unit	
Year 4 - Semester 2	
BEB701	Work Integrated Learning 1
ENB481	Civil Engineering Project Management
Second Major/Minor unit	
Selective	
Civil and Construction Engineering Selectives	
BEB802	Project 2
ENB477	Facade Engineering
ENB376	Transport Engineering

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Prof Manicka Dhanasekar

Domestic Assumed knowledge

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

- Maths B
- English

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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	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 Environmental) must obtain at least 60 days of industrial experience/practice in an engineering environment as part of the Work Integrated Learning unit.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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 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.

Bachelor of Engineering (Civil and Environmental)

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 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.

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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](#)
- [Civil and Environmental Engineering Selectives](#)

Code	Title
Year 1 - Semester 1	
ENB100	Engineering and Sustainability
ENB110	Engineering Statics and Materials
ENB130	Mechanical and Thermal Energy
MAB125	Foundations of Engineering Mathematics
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Year 1 - Semester 2	
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ENB200	Introducing Engineering Systems
MAB126	Mathematics for Engineering 1
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Year 2 - Semester 1	
ENB270	Engineering Mechanics of Materials
ENB272	Geotechnical Engineering 1
ENB273	Civil Materials
MAB233	Engineering Mathematics 3
Year 2 - Semester 2	
ENB274	Design of Environmentally Sustainable Systems
ENB275	Project Engineering 1
ENB276	Structural Engineering 1
ENB280	Hydraulic Engineering
Year 3 - Semester 1	
ENB372	Design and Planning of Highways
ENB378	Water Engineering
ENB383	Environmental Resource Management
NQB302	Earth Surface Systems
OR	
NQB314	Sedimentary Geology
Year 3 - Semester 2	
ENB371	Geotechnical Engineering 2
ENB376	Transport Engineering
ENB380	Environmental Law and Assessment
Selective	
Year 4 - Semester 1	
BEB801	Project 1
PQB360	Global Energy Balance and Climate Change
UDB266	Planning Processes and Consultations
Selective	
Year 4 - Semester 2	
BEB701	Work Integrated Learning 1
ENB377	Water and Waste Water Treatment Engineering
NQB403	Soils and the Environment
OR	
NQB614	Groundwater Systems

UDB370	Environmental Planning and Management
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

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Prof Manicka Dhanasekar

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

- Maths B
- English

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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	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 undertake 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

Minors:

Civil Engineering minor

plus

A minor from anywhere in QUT that is outside of the course. (see [University Wide Minors](#))

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

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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 also help your understanding of all aspects of engineering design.

Year 3

Increase your knowledge and skills in geotechnical and water engineering.

Bachelor of Engineering (Civil)

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 undertake 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 undertake 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 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](#)
- [Civil Engineering Selectives](#)

Code	Title
Year 1 - Semester 1	
ENB100	Engineering and Sustainability
ENB110	Engineering Statics and Materials
ENB130	Mechanical and Thermal Energy
MAB125	Foundations of Engineering Mathematics
OR	
MAB126	Mathematics for Engineering 1
Year 1 - Semester 2	
ENB120	Electrical Energy and Measurements
ENB150	Introducing Engineering Design
ENB200	Introducing Engineering Systems
MAB126	Mathematics for Engineering 1
OR	
MAB127	Mathematics for Engineering 2
Year 2 - Semester 1	
ENB270	Engineering Mechanics of Materials
ENB272	Geotechnical Engineering 1
ENB273	Civil Materials
MAB233	Engineering Mathematics 3
Year 2 - Semester 2	
ENB274	Design of Environmentally Sustainable Systems
ENB275	Project Engineering 1
ENB276	Structural Engineering 1
ENB280	Hydraulic Engineering
Year 3 - Semester 1	
ENB372	Design and Planning of Highways
ENB375	Structural Engineering 2
ENB378	Water Engineering
Second Major/Minor unit	
Year 3 - Semester 2	
ENB371	Geotechnical Engineering 2
ENB376	Transport Engineering
ENB377	Water and Waste Water Treatment Engineering
Second Major/Minor unit	
Year 4 - Semester 1	
BEB701	Work Integrated Learning 1
BEB801	Project 1
ENB471	Design of Concrete Structures and Foundations
Second Major/Minor unit	
Year 4 - Semester 2	
ENB472	Project Engineering 2
ENB476	Civil Engineering Design Project
Second Major/Minor unit	
Selective	
Civil Engineering Selectives	
BEB802	Project 2
ENB373	Design and Construction of Steel Structures

Bachelor of Engineering (Civil)

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	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Credit points full-time sem.	48
Start months	August
Int. Start Months	August
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Dr Wayne Kelly

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Discontinuation

From Semester 1 2010, this primary major has been discontinued. A second major in this discipline is currently under development.

Professional Recognition

Full professional accreditation from Engineers Australia 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 must complete at least 60 days industrial experience as part of the Work Integrated Learning unit in order to graduate.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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).

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](#)
- [Applications Minor Selectives](#)

Code	Title
Year 1 - Semester 1	
	Introducing Professional Learning
	Engineering Mechanics 1
	Engineering Materials
	Engineering Mathematics 1A
	OR
	Engineering Mathematics 1B
Year 1 - Semester 2	
	Introducing Sustainability
	Electrical Engineering
	Engineering Mathematics 2A
	OR
	Engineering Mathematics 2B
	Engineering Physics 1C
Year 2 - Semester 1	
ENB240	Introduction To Electronics
ENB242	Introduction To Telecommunications
INB104	Building IT Systems
MAB233	Engineering Mathematics 3
Year 2 - Semester 2	
ENB243	Linear Circuits and Systems
ENB244	Microprocessors and Digital Systems
ENB245	Introduction To Design and Professional Practice
INB270	Programming
Year 3 - Semester 1	
ENB301	Instrumentation and Control
ENB342	Signals, Systems and Transforms
ENB350	Real-time Computer-based Systems
INB371	Data Structures and Algorithms
Year 3 - Semester 2	
ENB345	Advanced Design and Professional Practice
ENB346	Digital Communications
ENB352	Communication Environments For Embedded Systems
INB251	Networks
Year 4 - Semester 1	
BEB701	Work Integrated Learning 1
BEB801	Project 1
ENB441	Applied Image Processing
Applications Minor Selective	
Year 4 - Semester 2	
BEB802	Project 2
ENB448	Signal Processing and Filtering
ENB458	Modern Control Systems
INB365	Systems Programming
Applications Minor Selectives	
Semester 1:	
INB340	Database Design
INB355	Cryptology and Protocols
INB373	Web Application Development
INB381	Modelling and Animation Techniques
Semester 2:	
INB272	Interaction Design

Bachelor of Engineering (Computer Systems)

INB374	Enterprise Software Architecture
INB382	Real Time Rendering Techniques

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Dr Wayne Kelly

Domestic Assumed knowledge

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

- Maths B
- English

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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	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.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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.

Year 3

You build on your knowledge of software engineering principles, covering topics

Bachelor of Engineering (Computer and Software Systems)

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 real-world 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 real-

world 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 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](#)
- [Computer and Software Systems Selectives](#)

Code	Title
Year 1 - Semester 1	
ENB100	Engineering and Sustainability
ENB110	Engineering Statics and Materials
ENB130	Mechanical and Thermal Energy
MAB125	Foundations of Engineering Mathematics
OR	
MAB126	Mathematics for Engineering 1
Year 1 - Semester 2	
ENB120	Electrical Energy and Measurements
ENB150	Introducing Engineering Design
ENB200	Introducing Engineering Systems
MAB126	Mathematics for Engineering 1
OR	
MAB127	Mathematics for Engineering 2
Year 2 - Semester 1	
ENB240	Introduction To Electronics
ENB246	Engineering Problem Solving
ENB250	Electrical Circuits
MAB127	Mathematics for Engineering 2
OR	
MAB233	Engineering Mathematics 3
Year 2 - Semester 2	
ENB243	Linear Circuits and Systems
INB210	Databases
INB251	Networks
INB270	Programming
Year 3 - Semester 1	
ENB354	Introduction To Systems Design
INB301	The Business of IT
INB370	Software Development
INB371	Data Structures and Algorithms
Year 3 - Semester 2	
ENB244	Microprocessors and Digital Systems
ENB355	Advanced Systems Design

INB365	Systems Programming
MAB233	Engineering Mathematics 3
OR	
Selective	
Year 4 - Semester 1	
BEB801	Project 1
OR	
INB309-1	Major Project
ENB350	Real-time Computer-based Systems
INB255	Security
Selective	
Year 4 - Semester 2	
BEB701	Work Integrated Learning 1
BEB802	Project 2
OR	
INB309-2	Major Project
INB272	Interaction Design
INB372	Agile Software Development
Computer and Software Systems Selectives	
ENB242	Introduction To Telecommunications
ENB344	Industrial Electronics
ENB352	Communication Environments For Embedded Systems
INB340	Database Design
INB355	Cryptology and Protocols
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
Any other unit approved by coordinator.	

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Professor Wageeh Boles

Domestic Assumed knowledge

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

- Maths B
- English

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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	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 undertake 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

Minors:

Electrical Engineering minor
plus

A minor from anywhere in QUT that is outside of the course. (see [University](#)

[Wide Minors](#))

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.

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

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

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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 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 undertake 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 undertake 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 - Semester 1	
ENB100	Engineering and Sustainability
ENB110	Engineering Statics and Materials
ENB130	Mechanical and Thermal Energy
MAB125	Foundations of Engineering Mathematics
OR	
MAB126	Mathematics for Engineering 1
Year 1 - Semester 2	
ENB120	Electrical Energy and Measurements
ENB150	Introducing Engineering Design
ENB200	Introducing Engineering Systems
MAB126	Mathematics for Engineering 1
OR	
MAB127	Mathematics for Engineering 2
Year 2 - Semester 1	
ENB240	Introduction To Electronics
ENB246	Engineering Problem Solving
ENB250	Electrical Circuits
MAB127	Mathematics for Engineering 2
OR	
MAB233	Engineering Mathematics 3
Year 2 - Semester 2	
ENB242	Introduction To Telecommunications
ENB243	Linear Circuits and Systems
ENB244	Microprocessors and Digital Systems
ENB245	Introduction To Design and Professional Practice
Year 3 - Semester 1	
ENB241	Software Systems Design
ENB301	Instrumentation and Control
ENB340	Power Systems and Machines
ENB342	Signals, Systems and Transforms
Year 3 - Semester 2	
ENB343	Fields, Transmission and Propagation
ENB344	Industrial Electronics
ENB345	Advanced Design and Professional Practice
MAB233	Engineering Mathematics 3
OR	

Bachelor of Engineering (Electrical)

Selective

Please note:

Students wishing to undertake CEED based Industry Project should consult the Subject Area Coordinator to provide a program for the final year. CEED program requires that you undertake units BEB701, BEB801 and BEB802 together in either Semester 1 or 2.

Year 4 - Semester 1

BEB801 Project 1

ENB346 Digital Communications

Second Major/Minor unit

Second Major/Minor unit

Year 4 - Semester 2

BEB701 Work Integrated Learning 1

BEB802 Project 2

Second Major/Minor unit

Second Major/Minor unit

Electrical Engineering Selectives

ENB339 Introduction to Robotics

ENB350 Real-time Computer-based Systems

ENB352 Communication Environments For Embedded Systems

ENB440 RF Techniques and Modern Applications

ENB441 Applied Image Processing

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

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Professor Ted Steinberg

Domestic Assumed knowledge

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

- Maths B
- English

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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	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 undertake either a second major or two minors (see options below).

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. (see [University Wide Minors](#))

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.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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 design, where you are introduced to solids modelling, materials and manufacture, instrumentation and control, dynamics, thermodynamics and stress

Bachelor of Engineering (Mechanical)

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 undertake 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 undertake 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 - Semester 1	
ENB100	Engineering and Sustainability
ENB110	Engineering Statics and Materials
ENB130	Mechanical and Thermal Energy
MAB125	Foundations of Engineering Mathematics
OR	
MAB126	Mathematics for Engineering 1
Year 1 - Semester 2	
ENB120	Electrical Energy and Measurements
ENB150	Introducing Engineering Design
ENB200	Introducing Engineering Systems
MAB126	Mathematics for Engineering 1
OR	
MAB127	Mathematics for Engineering 2
Year 2 - Semester 1	
ENB211	Dynamics
ENB212	Strength of Materials
ENB231	Materials and Manufacturing 1
MAB127	Mathematics for Engineering 2
OR	
MAB233	Engineering Mathematics 3
Year 2 - Semester 2	
ENB205	Electrical and Computer Engineering
ENB215	Fundamentals of Mechanical Design
ENB221	Fluid Mechanics
ENB331	Materials and Manufacturing 2
Please note:	
Students wishing to undertake CEED based Industry Project should consult the Subject Area Coordinator to provide a program for the final 2 years. CEED program requires that you undertake units BEB701, BEB801 and BEB802 together in either Semester 1 or 2.	
Year 3 - Semester 1	
ENB222	Thermodynamics 1
ENB311	Stress Analysis
ENB312	Dynamics of Machinery
ENB316	Design of Machine Elements
Year 3 - Semester 2	
ENB313	Automatic Control
ENB317	Design and Maintenance of Machinery
ENB321	Fluids Dynamics
MAB233	Engineering Mathematics 3
OR	

Bachelor of Engineering (Mechanical)

Selective	
Year 4 - Semester 1	
BEB801	Project 1
ENB421	Thermodynamics 2
Second Major/Minor unit	
Second Major/Minor unit	
Year 4 - Semester 2	
BEB701	Work Integrated Learning 1
BEB802	Project 2
Second Major/Minor unit	
Second Major/Minor unit	
Mechanical Engineering Selectives	
ENB314	Industrial Noise and Vibration
ENB333	Operations Management
ENB336	Industrial Engineering
ENB339	Introduction to Robotics
ENB422	Energy Management
ENB423	Heating, Ventilation and Air-Conditioning
ENB432	Engineering Asset Management and Maintenance
ENB433	Plant and Process Design
ENB434	Tribology
ENB435	Computer Integrated Manufacturing
ENB477	Facade Engineering

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Dr Frederic Maire

Domestic Assumed knowledge

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

- Maths B
- English

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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	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 undertake either a 2nd major or two minors (see options below).

MECHATRONICS 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. (see [University Wide Minors](#))

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

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).

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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

Bachelor of Engineering (Mechatronics)

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 undertake 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:

- 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.

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 undertake 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:

- 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](#)
- [Year 3 - Semester 2](#)
- [Year 4 - Semester 1](#)
- [Year 4 - Semester 2](#)
- [Mechatronics Selectives](#)

Code	Title
Year 1 - Semester 1	
ENB100	Engineering and Sustainability
ENB110	Engineering Statics and Materials
ENB120	Electrical Energy and Measurements
MAB125	Foundations of Engineering Mathematics
OR	
MAB126	Mathematics for Engineering 1
Year 1 - Semester 2	
ENB130	Mechanical and Thermal Energy
ENB150	Introducing Engineering Design
ENB200	Introducing Engineering Systems
MAB126	Mathematics for Engineering 1
OR	
MAB127	Mathematics for Engineering 2
Year 2 - Semester 1	
ENB211	Dynamics
ENB212	Strength of Materials
ENB231	Materials and Manufacturing 1
MAB127	Mathematics for Engineering 2
OR	
MAB233	Engineering Mathematics 3
Year 2 - Semester 2	
ENB215	Fundamentals of Mechanical Design
ENB221	Fluid Mechanics
ENB331	Materials and Manufacturing 2
INB104	Building IT Systems
Year 3 - Semester 1	
ENB222	Thermodynamics 1
ENB240	Introduction To Electronics
ENB250	Electrical Circuits
ENB334	Design For Manufacturing
Year 3 - Semester 2	
ENB243	Linear Circuits and Systems
ENB244	Microprocessors and Digital Systems
ENB436	Mechatronics System Design
INB270	Programming
Year 4 - Semester 1	
ENB301	Instrumentation and Control
INB370	Software Development

Bachelor of Engineering (Mechatronics)

INB860	Computational Intelligence for Control and Embedded Systems
MAB233	Engineering Mathematics 3
OR	
Selective	
Year 4 - Semester 2	
BEB701	Work Integrated Learning 1
BEB801	Project 1
BEB802	Project 2
ENB333	Operations Management
Mechatronics Selectives	
ENB245	Introduction To Design and Professional Practice
ENB457	Controls, Systems and Applications
OR any INB unit with permission from Coordinator.	

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Dr Devakar Epari

Domestic Assumed knowledge

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

- Maths B
- English

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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.0

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.

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).

Further Information

Science and Engineering Faculty - Phone

+61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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 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

Bachelor of Engineering (Medical)

complete your work integrated learning.

Minors

For professional recognition you will undertake an applications minor which consists of a workplace integrated 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 integrated 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 2](#)
- [Year 4 - Semester 1](#)
- [Year 4 - Semester 2](#)
- [Medical Engineering Selectives](#)

Code	Title
Year 1 - Semester 1	
ENB100	Engineering and Sustainability
ENB110	Engineering Statics and Materials
ENB130	Mechanical and Thermal Energy
MAB125	Foundations of Engineering Mathematics
OR	
MAB126	Mathematics for Engineering 1
Year 1 - Semester 2	
ENB120	Electrical Energy and Measurements
ENB150	Introducing Engineering Design
ENB200	Introducing Engineering Systems
MAB126	Mathematics for Engineering 1
OR	
MAB127	Mathematics for Engineering 2
Year 2 - Semester 1	
ENB211	Dynamics
ENB212	Strength of Materials
LSB131	Anatomy
MAB127	Mathematics for Engineering 2
OR	
MAB233	Engineering Mathematics 3
Year 2 - Semester 2	
ENB205	Electrical and Computer Engineering
ENB215	Fundamentals of Mechanical Design
ENB221	Fluid Mechanics
LSB231	Physiology
Year 3 - Semester 1	
ENB222	Thermodynamics 1
ENB231	Materials and Manufacturing 1
ENB311	Stress Analysis
ENB319	Biomechanical Engineering Design
Year 3 - Semester 2	

ENB313	Automatic Control
ENB318	Biomechanical Engineering Systems
ENB338	Biomaterials
ENB322	Biofluids
Year 4 - Semester 1	
BEB801	Project 1
ENB335	Modelling and Simulation For Medical Engineers
ENB432	Engineering Asset Management and Maintenance
MAB233	Engineering Mathematics 3
OR	
Selective	
Year 4 - Semester 2	
BEB701	Work Integrated Learning 1
BEB802	Project 2
ENB437	Health Legislation in the Medical Environment
PCB605	Biomedical Instrumentation
Medical Engineering Selectives	
BSB115	Management
MAB220	Computational Mathematics 1
MAB422	Mathematical Modelling
PCB593	Digital Image Processing
PCN112	Medical Imaging Science
PCN211	Physics of Medical Imaging
PYB100	Foundation Psychology
SCB384	Forensic Sciences - From Crime Scene to Court

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Associate Professor Geoffrey Will

Domestic Assumed knowledge

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

- Maths B
- English

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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.0

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

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.

Professional membership

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

Minors

You will have the opportunity to undertake a minor from anywhere in QUT that is outside of the course. (see [University Wide Minors](#))

Further Information

Science and Engineering Faculty -
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

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.

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 Engineering (Process Engineering)

Code	Title
Year 1 - Semester 1	
ENB100	Engineering and Sustainability
ENB110	Engineering Statics and Materials
ENB130	Mechanical and Thermal Energy
MAB125	Foundations of Engineering Mathematics
OR	
MAB126	Mathematics for Engineering 1
Year 1 - Semester 2	
ENB120	Electrical Energy and Measurements
ENB150	Introducing Engineering Design
ENB200	Introducing Engineering Systems
MAB126	Mathematics for Engineering 1
OR	
MAB127	Mathematics for Engineering 2
Year 2 - Semester 1	
MAB233	Engineering Mathematics 3
ENB222	Thermodynamics 1
ENB231	Materials and Manufacturing 1
In 2013 take:	
PQB525	Unit Operations
From 2014 onwards take:	
Unit Operations	
Year 2 - Semester 2	
CVB101	General Chemistry
ENB221	Fluid Mechanics
CVB211	Industrial Chemistry
ENB260	Operations Management and Process Economics
Year 3 - Semester 1	
Heat and Mass Transfer Operations	
Minerals and Minerals Processing	
Safety and Environmental Management	
Minor unit	
Year 3 - Semester 2	
ENB313	Automatic Control
CVB102	Chemical Structure and Reactivity
Bulk Materials Handling	
Minor unit	
Year 4 - Semester 1	
BEB801	Project 1
Advanced Process Modelling	
Advanced Process Control Systems	
Minor unit	
Year 4 - Semester 2	
SEB701	Work Integrated Learning 1
BEB802	Project 2
ENB433	Plant and Process Design
Minor unit	

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Credit points full-time sem.	48
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Dr Wayne Kelly

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	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).

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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.

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 Engineering (Software Engineering)

- [Software Engineering Selectives](#)

Code	Title
Year 1 - Semester 1	
ENB100	Engineering and Sustainability
ENB110	Engineering Statics and Materials
ENB120	Electrical Energy and Measurements
MAB125	Foundations of Engineering Mathematics
OR	
MAB126	Mathematics for Engineering 1
Year 1 - Semester 2	
ENB130	Mechanical and Thermal Energy
ENB150	Introducing Engineering Design
ENB200	Introducing Engineering Systems
MAB126	Mathematics for Engineering 1
OR	
MAB127	Mathematics for Engineering 2
Year 2 - Semester 1	
ENB240	Introduction To Electronics
ENB246	Engineering Problem Solving
ENB250	Electrical Circuits
MAB127	Mathematics for Engineering 2
OR	
MAB233	Engineering Mathematics 3
Year 2 - Semester 2	
ENB243	Linear Circuits and Systems
INB210	Databases
INB251	Networks
INB270	Programming
Year 3 - Semester 1	
ENB354	Introduction To Systems Design
INB301	The Business of IT
INB370	Software Development
INB371	Data Structures and Algorithms
Year 3 - Semester 2	
ENB244	Microprocessors and Digital Systems
ENB355	Advanced Systems Design
INB365	Systems Programming
MAB233	Engineering Mathematics 3
OR	
Selective	
Year 4 - Semester 1	
BEB801	Project 1
OR	
INB309-1	Major Project
ENB350	Real-time Computer-based Systems
INB255	Security
Selective	
Year 4 - Semester 2	
BEB701	Work Integrated Learning 1
BEB802	Project 2
OR	
INB309-2	Major Project
INB272	Interaction Design
INB372	Agile Software Development
Software Engineering Selectives	
ENB242	Introduction To Telecommunications

ENB344	Industrial Electronics
ENB352	Communication Environments For Embedded Systems
INB340	Database Design
INB355	Cryptology and Protocols
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
Any other unit approved by coordinator.	

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Credit points full-time sem.	48
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Dr Jasmine Banks

Domestic Assumed knowledge

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

- Maths B
- 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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.0

Discontinuation

From Semester 1 2010, this primary major has been discontinued. A second major in this discipline is currently under development.

Professional Recognition

Full professional accreditation from Engineers Australia 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

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

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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).

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	
	Introducing Professional Learning
	Engineering Mechanics 1
	Engineering Materials
	Engineering Mathematics 1A
	OR
	Engineering Mathematics 1B
Year 1 - Semester 2	
	Introducing Sustainability
	Electrical Engineering
	Engineering Mathematics 2A
	OR
	Engineering Mathematics 2B
	Engineering Physics 1C
Year 2 - Semester 1	
ENB240	Introduction To Electronics
ENB242	Introduction To Telecommunications
INB104	Building IT Systems
MAB233	Engineering Mathematics 3
Year 2 - Semester 2	
ENB243	Linear Circuits and Systems
ENB244	Microprocessors and Digital Systems
ENB245	Introduction To Design and Professional Practice
INB270	Programming
Year 3 - Semester 1	
ENB301	Instrumentation and Control
ENB342	Signals, Systems and Transforms
ENB343	Fields, Transmission and Propagation
INB371	Data Structures and Algorithms
Year 3 - Semester 2	
BEB701	Work Integrated Learning 1
ENB345	Advanced Design and Professional Practice
ENB346	Digital Communications
INB251	Networks
Year 4 - Semester 1	
BEB801	Project 1
ENB440	RF Techniques and Modern Applications
INB350	Internet Protocols and Services
INB353	Wireless and Mobile Networks
Year 4 - Semester 2	

Bachelor of Engineering (Telecommunications)

BEB802	Project 2
RF Communication Technologies	
ENB446	Wireless Communications
ENB448	Signal Processing and Filtering

Handbook

Year	2013
QUT code	EN40
CRICOS	056529D
Duration (full-time)	4 years
OP	1
Rank	99
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,100 per Semester
Total credit points	384
Start months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Int. Start Months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	

Domestic Entry requirements 2013 questionnaires have closed

Questionnaires for the 2013 intake were due to completed on the 16 November 2012 and are now closed. If you had not submitted the questionnaire and you are considering applying to study in 2014 we recommend you read the following information as a guide only as it details requirements for entry in 2013 and these may change prior to the 2014 intake. You may also wish to consider applying for the standard entry program for 2013 entry.

Prerequisites

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Additional entry requirements

In addition to applying through QTAC and you must also submit the [online Science and Engineering Dean's Scholars questionnaire](#) by the closing date.

Please note submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Closing date

Submit the [online questionnaire](#) with QUT by Friday, 16 November 2012.

Domestic Assumed knowledge

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

- Maths B
- English

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 Entry requirements

Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional questionnaire

In addition to applying through QTAC and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available October) by the closing date.

Please note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with QTAC. To successfully apply for entry into this course you are required to do both.

QTAC

Applicants will be notified via email when the questionnaire is available.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.0

Conditions as of 2013.

To keep a place in the Dean's Scholars program, students must:

- maintain enrolment full-time in the eligible undergraduate course
- graduate from the Bachelor of Engineering within 4 years of starting, except where you've taken a leave of absence approved by the Assistant Dean, or there are other extenuating circumstances
- maintain a grade point average (GPA) of at least 6.0 each semester
- meet the requirements of program completion (for example work experience and work integrated learning)

Bachelor of Engineering - Dean's Scholars Program

- pay any costs associated with their program that aren't covered by the scholarship, including additional and repeated units
- demonstrate adequate participation in extracurricular elements of the program.

Students can:

- apply to change their course structure under exceptional circumstances. Students must apply through their academic mentor or course coordinator, and receive prior written approval from the Assistance Dean International and Engagement.
- apply [for other scholarships and bursaries](#), including ones associated with travel, as long as they are allowed to under the conditions of the other scholarship and under our [Industry sponsored student scholarships policy](#).

Financial Support as of 2013.

Successful applicants will receive:

- A scholarship of up to \$6,000 per annum, usually payable in 2 instalments of \$3,000 by the 2nd week of semester 1 and semester 2 of each year. The scholarship would apply for the full-time duration of the undergraduate degree, contingent upon students meeting the conditions of the program (refer to Conditions below). The total value of the scholarship is limited to \$18,000 for the 3 year programs and \$24,000 for the 4 year programs.

Financial Support prior to 2013.

Students who enrol will receive a full scholarship that includes payment of all undergraduate Higher Education Contribution Scheme (HECS) monies for the bachelor program.

Special Course Requirements

Dean's Scholars are expected to maintain a GPA of 6.0 or above and complete 60 days of Industry experience. For a copy of the program rules and regulations please contact the [International and Engagement Portfolio](#) of the Science and Engineering Faculty.

Professional Recognition

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

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Course Structure

For full course structure details, please see [EN40 Bachelor of Engineering](#)

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.

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](#)
- [Aerospace Avionics Selectives](#)

Code	Title
Year 1 - Semester 1	
ENB100	Engineering and Sustainability
ENB110	Engineering Statics and Materials
ENB130	Mechanical and Thermal Energy
MAB125	Foundations of Engineering Mathematics
OR	
MAB126	Mathematics for Engineering 1
Year 1 - Semester 2	
ENB120	Electrical Energy and Measurements
ENB150	Introducing Engineering Design
ENB200	Introducing Engineering Systems
MAB126	Mathematics for Engineering 1
OR	
MAB127	Mathematics for Engineering 2
Year 2 - Semester 1	
ENB240	Introduction To Electronics
ENB246	Engineering Problem Solving
ENB250	Electrical Circuits
MAB127	Mathematics for Engineering 2
OR	
MAB233	Engineering Mathematics 3
Year 2 - Semester 2	
ENB121	Aerodynamics
ENB242	Introduction To Telecommunications

ENB243	Linear Circuits and Systems
ENB244	Microprocessors and Digital Systems
Year 3 - Semester 1	
ENB241	Software Systems Design
ENB342	Signals, Systems and Transforms
ENB348	Aircraft Systems and Flight Control
ENB354	Introduction To Systems Design
Year 3 - Semester 2	
ENB343	Fields, Transmission and Propagation
ENB347	Modern Flight Control Systems
ENB355	Advanced Systems Design
MAB233	Engineering Mathematics 3
OR	
Selective	
Year 4 - Semester 1	
BEB801	Project 1
ENB346	Digital Communications
ENB440	RF Techniques and Modern Applications
ENB451	Aerospace Radio and Radar Systems
Year 4 - Semester 2	
BEB701	Work Integrated Learning 1
BEB802	Project 2
ENB357	Spacecraft Dynamics and Control
ENB447	Navigation Systems For Aircraft
Aerospace Avionics Selectives	
ENB344	Industrial Electronics
ENB441	Applied Image Processing
ENB448	Signal Processing and Filtering
ENB457	Controls, Systems and Applications
INB270	Programming

Handbook

Year	2013
QUT code	IT04
CRICOS	059710E
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
OP	13
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4300 per Semester (48 credit points)
International fee (indicative)	2013: \$12,000 per Semester
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 Michael Docherty
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)).

International Subject prerequisites

- English

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 A, B or C (4, SA)).

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 occurring 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 24-credit-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.

MINORS

- Animation
- Advanced Animation*
- Digital Media
- Entrepreneurship
- Game Design
- Legal Issues

Bachelor of Games and Interactive Entertainment

- 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 Education 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 [Cooperative Education Program](#).

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 [QUT's international site](#).

Domestic applicants should view the credit information on the [Student Services site](#).

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.

Further Information

For Further Information about this course please contact:

Michael Docherty
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Domestic 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
- Legal Issues
- Marketing
- Mathematics for Games
- Mobile and Network Technologies
- Physics for Games
- 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

Bachelor of Games and Interactive Entertainment

- 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 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.

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
- Legal Issues
- Marketing
- Mathematics for Games
- Mobile and Network Technologies
- Physics for Games
- 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
- 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 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	Title
The course consists of four blocks of studies	
Block A: Core Studies (7 units including a 24 credit point Project)	
Block B: Major (8 units) selected from Animation; Games Design; Software 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	
INB180	Computer Games Studies
INB104	Building IT Systems
INB103	Industry Insights
IFB103	Design IT
Year 1, Semester 2	
INB181	Introduction to Games Production
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 1	
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 2, Semester 2	
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	
INB379	Game Project Design
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	
INB380	Games Project
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	2013
QUT code	IT04
CRICOS	059710E
Duration (full-time)	3 years
OP	1
Rank	99
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4300 per Semester (48 credit points)
International fee (indicative)	2013: \$12,000 per Semester
Total credit points	
Start months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Int. Start Months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Course Coordinator	Richard Thomas
Discipline Coordinator	

Domestic Entry requirements 2013 questionnaires have closed

Questionnaires for the 2013 intake were due to completed on the 16 November 2012 and are now closed. If you had not submitted the questionnaire and you are considering applying to study in 2014 we recommend you read the following information as a guide only as it details requirements for entry in 2013 and these may change prior to the 2014 intake. You may also wish to consider applying for the standard entry program for 2013 entry.

Prerequisites

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Additional entry requirements

In addition to applying through QTAC and you must also submit the [online Science and Engineering Dean's Scholars questionnaire](#) by the closing date.

Please note submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Closing date

Submit the [online questionnaire](#) with QUT by Friday, 16 November 2012.

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)).

International Entry requirements Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional Entry Requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available August) by the closing date.

Please Note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

International Subject prerequisites

- English

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 A, B or C (4, SA)).

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Please Note

As of 2013, all new Dean's Scholar applicants will be admitted into the standard Bachelor programs, with no accelerated studies and no pre-approved articulation to Honours degrees.

Eligibility Criteria

Applicants must:

- have completed Year 12 in the year they apply for the program, or the previous year
- have received an OP 1 (or equivalent)
- be starting university for the first time
- demonstrate leadership experience and potential
- demonstrate community participation and engagement
- apply for and gain a place in the relevant Dean's Scholars Program

Bachelor of Games and Interactive Entertainment - Dean's Scholars Program

If studying at QUT International College (QUTIC), applicant must have a grade point average (GPA) of at least 6.5 for the two semesters immediately before they apply for the Dean's Scholars Program.

If expecting to get an OP of 1-3, applicant should apply for consideration.

Financial Support as of 2013.

Successful applicants will receive:

- A scholarship of up to \$6,000 per annum, usually payable in 2 instalments of \$3,000 by the 2nd week of semester 1 and semester 2 of each year. The scholarship would apply for the full-time duration of the undergraduate degree, contingent upon students meeting the conditions of the program (refer to Conditions below). The total value of the scholarship is limited to \$18,000 for the 3 year programs and \$24,000 for the 4 year programs.

Conditions as of 2013.

To keep a place in the Dean's Scholars program, students must:

- maintain enrolment full-time in the eligible undergraduate course
- graduate from the Bachelor of Games and Interactive Entertainment within 3 years of starting, except where you've taken a leave of absence approved by the Assistant Dean, or there are other extenuating circumstances
- maintain a grade point average (GPA) of at least 6.0 each semester
- meet the requirements of program completion (for example work experience and work integrated learning)
- pay any costs associated with their program that aren't covered by the scholarship, including additional and repeated units
- demonstrate adequate participation in extracurricular elements of the program.

Students can:

- apply to change their course structure under exceptional circumstances. Students must apply through their academic mentor or course coordinator, and receive prior written approval from the Assistance Dean International and Engagement.

- apply [for other scholarships and bursaries](#), including ones associated with travel, as long as they are allowed to under the conditions of the other scholarship and under our [Industry sponsored student scholarships policy](#).

Financial Support prior to 2013

Domestic students offered a place in the Dean's Scholars Program will have their undergraduate HECS paid by the Faculty and those proceeding to Honours will also receive full HECS support.

International students will have one-third of their tuition fees paid by the faculty for the undergraduate and honours programs.

Students are responsible for all other costs associated with their program.

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. 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, 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 24 credit-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), architecture and interior design to encourage the creation of interesting and unique models within the virtual environment.

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
- Legal Issues
- Marketing
- Mathematics for Games
- Mobile and Network Technologies
- Physics for Games
- Software Technologies
- Advanced Software Technologies^
- Sound Design

#Requirement for this major is an SA or better in Queensland Maths B (or equivalent).

*Only available to those undertaking the animation major.

^Only available to those undertaking the software technologies major.

Professional Recognition

As a graduate of the Dean's Scholars Program you will be qualified for professional accreditation and employment in fields relevant to your specialisation.

Career Outcomes

Depending on your specialisation, graduates may find employment as a games/digital media programmer, game designer, simulation developer or designer, animator, film and television special effects developer, games/digital media reviewer, video game tester, sound designer, mobile entertainment and communications developer, web

developer, digital product strategist, computer systems engineer, multimedia designer, software engineer, or technical officer.

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 special topic. You will complete your units for your chosen major, minor and electives.

Note:

The Faculty may wish to make your project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

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 Education 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 [Cooperative Education Program](#).

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

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Domestic 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.

Digital Media

This major will prepare you for careers as digital game designers, developers and multimedia architects, making use of the rapid convergence of mixing graphics, video, animation and sound to meet the increasingly complex world of digital entertainment. Organisations are also interested in the strategies that multimedia architects contribute to achieving maximum efficiency and competitiveness, such as integrating multimedia content with information in enterprise software systems and the organisation's websites.

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
- Legal Issues
- Marketing
- Mathematics for Games
- Mobile and Network Technologies
- Physics for Games
- 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
- 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 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.

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.

Digital Media

This major will prepare you for careers as digital game designers, developers and multimedia architects, making use of the rapid convergence of mixing graphics, video, animation and sound to meet the increasingly complex world of digital entertainment. Organisations are also interested in the strategies that multimedia architects contribute to achieving maximum efficiency and competitiveness, such as integrating

multimedia content with information in enterprise software systems and the organisation's websites.

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
- Legal Issues
- Marketing
- Mathematics for Games
- Mobile and Network Technologies
- Physics for Games
- 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
- 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 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

Code	Title
Course Notes	
Refer to IT04 course structure.	

Handbook

Year	2013
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
Domestic fee (indicative)	2013: CSP \$4400 per Semester (48 credit points)
International fee (indicative)	2013: \$11,800 per Semester
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	Dr Taizan Chan
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)).

International Subject prerequisites

- English

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 A, B or C (4, SA)).

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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-savvy 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 [Cooperative Education Program](#).

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

Further Information

For further information about this course, please contact the following:

Course Co-ordinator

Dr Taizan Chan

Phone: +61 7 3138 8822

Email: sef.enquiry@qut.edu.au

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:

Bachelor of Corporate Systems Management

- 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.

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 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 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.

Sample Structure Semesters

- [Course Structure 2011 onwards](#)
- [Year 1, Semester 1](#)
- [Year 1, Semester 2](#)
- [Year 2, Semester 1](#)
- [Year 2, Semester 2](#)
- [Year 3, Semester 1](#)
- [Year 3, Semester 2](#)

- [Block B: Complimentary Studies](#)
- [Banking and Finance](#)
- [Creative Industries Management](#)
- [Construction Management - Administration](#)
- [Human Resource Management](#)
- [Law](#)
- [Management](#)
- [Marketing](#)
- [Organisational Psychology](#)
- [Public Health](#)
- [Justice \(Criminology\)](#)
- [Specialisation - IT \(Digital Environments\)](#)
- [Intermediate Level Electives](#)

Code	Title
Course Structure 2011 onwards	
Year 1, Semester 1	
INB103	Industry Insights
INB120	Corporate Systems
INB101	Impact of IT
INB122	Organisational Databases
Year 1, Semester 2	
BSB115	Management
INB123	Project Management Practice
INB124	Information Systems Development
Block B Unit	
Year 2, Semester 1	
INB220	Business Analysis
INB221	Technology Management
MGB223	Entrepreneurship and Innovation
Block B Unit	
Year 2, Semester 2	
BSB126	Marketing
INB313	Electronic Commerce Site Development
Block B Unit	
Block B Unit	
Year 3, Semester 1	
INB312	Enterprise Systems Applications
INB322	Information Systems Consulting
Block B Unit	
Block B Unit	
Year 3, Semester 2	
INB320	Business Process Modelling
INB325	Corporate Systems Management Project
Block B Unit	
Block B Unit	
Block B: Complimentary Studies	
Students select 96cp comprising of IT unit set(s) or from those offered by other Faculties at QUT. Alternatively, students may undertake eight elective units with the approval of the Course Coordinator.	
Banking and Finance	
BSB113	Economics
BSB123	Data Analysis
EFB201	Financial Markets
EFB210	Finance 1
EFB222	Quantitative Methods For Economics and Finance
EFB223	Economics 2

Bachelor of Corporate Systems Management

EFB307	Finance 2
EFB312	International Finance
Creative Industries Management	
KTB104	Performance Innovation
KTB207	Staging Australia
KTB210	Creative Industries Management
KTB211	Creative Industries Events and Festivals
Construction Management - Administration	
UDB101	Stewardship of Land
UDB104	Urban Development Economics
UDB110	Residential Construction and Engineering
UDB111	Engineering Construction Materials
Human Resource Management	
MGB200	Leading Organisations
MGB201	Contemporary Employment Relations
MGB207	Human Resource Issues and Strategy
MGB314	Organisational Consulting and Change
MGB320	Recruitment and Selection
MGB331	Learning and Development in Organisations
MGB339	Performance and Reward
MGB370	Personal and Professional Development
Law	
LWB136	Contracts A
LWB137	Contracts B
LWB145	Legal Foundations A
LWB146	Legal Foundations B
LWB238	Fundamentals of Criminal Law
LWB241	Trusts
LWB242	Constitutional Law
LWB334	Corporate Law
Management	
BSB111	Business Law and Ethics
BSB113	Economics
BSB119	Global Business
BSB124	Working in Business
MGB200	Leading Organisations
MGB210	Managing Operations
MGB309	Strategic Management
MGB324	Managing Business Growth
Marketing	
AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research
AMB240	Marketing Planning and Management
AMB335	E-marketing Strategies
AMB359	Strategic Marketing
Organisational Psychology	
PYB007	Interpersonal Processes and Skills
PYB100	Foundation Psychology
PYB202	Social and Organisational Psychology
PYB302	Industrial and Organisational Psychology
Public Health	
PUB251	Contemporary Public Health

PUB326	Epidemiology
PUB332	Sustainable Environments For Health
PUB406	Health Promotion Practice
Justice (Criminology)	
JSB170	Introduction to Criminology and Policing
JSB171	Justice and Society
JSB272	Theories of Crime
JSB273	Crime Research Methods
JSB372	Youth Justice
Punishment and Penal Policy	
JSB374	Crime Prevention
LWB145	Legal Foundations A
Specialisation - IT (Digital Environments)	
INB104	Building IT Systems
INB210	Databases
INB270	Programming
INB335	Information Resources
INB340	Database Design
INB345	Mobile Devices
INB346	Enterprise 2.0
INB347	Web 2.0 Applications
Intermediate Level Electives	
INB120	Corporate Systems
INB220	Business Analysis
INB255	Security
INB272	Interaction Design
Or, an INB300 level unit as approved by the course coordinator	

Handbook

Year	2013
QUT code	IT06
CRICOS	059712C
Duration (full-time)	3 years
OP	1
Rank	99
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4400 per Semester (48 credit points)
International fee (indicative)	2013: \$11,800 per Semester
Total credit points	
Start months	February Fixed closing date - 16 November 2012.
Int. Start Months	February Fixed closing date - 30 November
Course Coordinator	Richard Thomas
Discipline Coordinator	

Domestic Entry requirements 2013 questionnaires have closed

Questionnaires for the 2013 intake were due to completed on the 16 November 2012 and are now closed. If you had not submitted the questionnaire and you are considering applying to study in 2014 we recommend you read the following information as a guide only as it details requirements for entry in 2013 and these may change prior to the 2014 intake. You may also wish to consider applying for the standard entry program for 2013 entry.

Prerequisites

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Additional entry requirements

In addition to applying through QTAC and you must also submit the [online Science and Engineering Dean's Scholars questionnaire](#) by the closing date.

Please note submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Closing date

Submit the [online questionnaire](#) with QUT by Friday, 16 November 2012.

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)).

International Entry requirements Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional entry requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available October) by the closing date.

Please note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Applicants will be notified via email when the questionnaire is available.

International Subject prerequisites

- English

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 A, B or C (4, SA)).

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Please Note

As of 2013, all new Dean's Scholar applicants will be admitted into the standard Bachelor programs, with no accelerated studies and no pre-approved articulation to Honours degrees.

Eligibility Criteria

Applicants must:

- have completed Year 12 in the year they apply for the program, or the previous year
- have received an OP 1 (or equivalent)
- be starting university for the first time
- demonstrate leadership experience and potential
- demonstrate community participation

and engagement

- apply for and gain a place in the relevant Dean's Scholars Program

If studying at QUT International College (QUTIC), applicant must have a grade point average (GPA) of at least 6.5 for the two semesters immediately before they apply for the Dean's Scholars Program.

If expecting to get an OP of 1-3, applicant should apply for consideration.

Financial Support as of 2013.

Successful applicants will receive:

- A scholarship of up to \$6,000 per annum, usually payable in 2 instalments of \$3,000 by the 2nd week of semester 1 and semester 2 of each year. The scholarship would apply for the full-time duration of the undergraduate degree, contingent upon students meeting the conditions of the program (refer to Conditions below). The total value of the scholarship is limited to \$18,000 for the 3 year programs and \$24,000 for the 4 year programs.

Conditions as of 2013.

To keep a place in the Dean's Scholars program, students must:

- maintain enrolment full-time in the eligible undergraduate course
- graduate from the Bachelor of Corporate Systems Management within 3 years of starting, except where you've taken a leave of absence approved by the Assistant Dean, or there are other extenuating circumstances
- maintain a grade point average (GPA) of at least 6.0 each semester
- meet the requirements of program completion (for example work experience and work integrated learning)
- pay any costs associated with their program that aren't covered by the scholarship, including additional and repeated units
- demonstrate adequate participation in extracurricular elements of the program.

Students can:

- apply to change their course structure under exceptional circumstances. Students must apply through their academic mentor or course coordinator, and receive prior written approval from the Assistance Dean International and Engagement.
- apply [for other scholarships and bursaries](#), including ones associated with travel, as long as they are allowed to under the conditions of the other scholarship and under our [Industry](#)

[sponsored student scholarships policy](#).

Financial Support prior to 2013

Domestic students offered a place in the Dean's Scholars Program will have their undergraduate HECS paid by the Faculty and those proceeding to Honours will also receive full HECS support.

International students will have one-third of their tuition fees paid by the faculty for the undergraduate and honours programs.

Students are responsible for all other costs associated with their program.

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-savvy 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

Career Outcomes

Career destinations from this degree are management, analyst or consultant roles such as business analyst, project manager, process analyst, program manager, or data manager in fields ranging from health to finance to media and entertainment services. If you are interested in creating your own business, you may start your own consultancy service to assist businesses in using information technology and improve their business performance. The career possibilities are numerous and relevant experience is in great demand by industry.

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

As a graduate of the Dean's Scholars Program you will be qualified for professional accreditation and employment in fields relevant to your specialisation.

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.

Bachelor of Corporate Systems Management - Dean's Scholars Program

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.

Note:

The Faculty may wish to make your project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

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 Education 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 [Cooperative Education Program](#).

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

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Domestic Course structure 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.

International Course structure

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.

Sample Structure

Refer to the [IT06 course structure](#).

Code	Title
Course Notes	

Handbook

Year	2013
QUT code	IT21
Duration (full-time)	3 years
Duration (part-time)	6 years
OP Guarantee	Yes
Campus	Gardens Point and Carseldine
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
Total credit points	288
Course Coordinator	Mr Richard Thomas
Discipline Coordinator	

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course Update

This course is no longer offered to commencing students. Please refer to IT23 for students commencing in 2009.

Course Design

The course structure is divided into three blocks:

Block 1: Common First Year

All students undertake a Common First Year: the first year full-time or first two years part-time of the course. This block is worth 96 credit points.

Block 2: Major

At the end of the Common First Year, students choose a major area of study. Four single majors and three integrated majors are available. The Major extends over the second and third years of the course for full-time students, and the third to sixth years for part-time students. Students select one of the following Majors:

- Data Communications (DAT)
- Electronic Commerce (ELC)
- Emerging Technologies (EMT)
- Information Systems (ISS)
- Software Engineering (SOF)
- Data Communications/Information Systems (DCI)
- Data Communications/Software Engineering (CDC)

Block 3: General Electives

Students choose the composition of the third block of the course, which extends over the later years of the course and is worth:

- 48 credit points for majors: DAT, SOF, ELC, and ISS; OR
- 24 credit points for majors: EMT, DCI and CDC

Students are encouraged to consider selecting units from outside the Faculty in order to broaden their range of skills.

This course is offered for continuing students only. Please refer to IT23 for

students commencing from 2009.

Professional Recognition

Graduates of the Bachelor of Information Technology meet the knowledge requirement for admission to the Australian Computer Society (ACS) as members.

Co-operative Education Program

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](#).

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.

Handbook

Year	2013
QUT code	IT22
Duration (full-time)	3 years
Duration (part-time)	6 years
OP	13
Rank	74
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$11,900 per Semester
Total credit points	288
Course Coordinator	Mr Richard Thomas
Discipline Coordinator	

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course Update Information

From semester one, 2009 this course will not be available for commencing students. IT22 will only be available for continuing students. New students - please refer to IT23.

For IT22 course structure, please now refer to the [QUT Handbooks](#).

For further assistance, please contact sef.enquiry@qut.edu.au.

Cooperative Education Program

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](#).

Professional Recognition

Graduates of the Bachelor of Information Technology meet the knowledge requirement for admission to the Australian Computer Society (ACS) as members.

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.

Further Information

For further information about this course, please contact the following:

Course Co-Ordinator

Mr Richard Thomas
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Sample Structure Semesters

- [Course Structure](#)
- [Recommended Core Unit Progression](#)
- [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
Course Structure	
From semester one, 2009 this course will not be available for commencing students. IT22 will only be available for continuing students. New students - please refer to IT23. Please contact enquiry.scitech@qut.edu.au for any enquiries.	
The course structure consists of 10 IT Core Studies Units (Block A), 6 Major Units (Block B) if applicable, and 8 Complementary Studies Area Units (Block C). For those students who choose the Generic No Major option, students replace the major units with any 6 ITBxxx units provided they meet the prerequisites.	
Eight (8) Block A units are completed in the first year, while the remaining two (2) Block A units are completed later in the course.	
Block C Complementary Studies Area (8 units): Students choose the composition which may include: a second IT Major (6 units) or an approved minor (4 units) and 4 electives or 8 specified electives as approved by the Course Coordinator.	
Recommended Core Unit Progression	
Year 1, Semester 1	
INB104	Building IT Systems
INB103	Industry Insights
INB210	Databases
INB250	Foundations of Computer Science
Year 1, Semester 2	
INB270	Programming
INB251	Networks
INB271	The Web
Choose one unit from: Intermediate Level Elective list. This choice will replace ITB008 from 2009 course summary.	
Year 2, Semester 1	
Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	

Bachelor of Information Technology

Year 2, Semester 2

INB301 The Business of IT

Block B or Block C Unit

Block B or Block C Unit

Block B or Block C Unit

Year 3, Semester 1

INB302 IT Capstone Project

Block B or Block C Unit

Block B or Block C Unit

Block B or Block C Unit

Year 3, Semester 2

Block B or Block C Unit

Block B or Block C Unit

Block B or Block C Unit

Block B or Block C Unit

Handbook

Year	2013
QUT code	IT22
Duration (full-time)	3 years
OP	3
Rank	96
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$11,900 per Semester
Total credit points	
Course Coordinator	Mr Richard Thomas
Discipline Coordinator	

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course discontinuation

From semester one, 2009 this course will not be available for commencing students. IT22 will only be available for continuing students. New students - please refer to IT23.

Financial Support

Domestic students offered a place in the Dean's Scholars Program will have their undergraduate HECS paid by the Faculty and those proceeding to Honours will also receive full HECS support.

International students will have one-third of their tuition fees paid by the faculty for the undergraduate and honours programs.

Students are responsible for all other costs associated with their program.

Cooperative Education Program

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. Students wishing to participate in the Cooperative Education Program should be aware that they will not receive financial support as a Dean's Scholar for the duration of the placement.

Find out more about the [Cooperative Education Program](#).

Professional Recognition

As a graduate of the Dean's Scholars Program you will be qualified for professional accreditation and employment in fields relevant to your specialisation.

New Unit

Translations/Incompatibility Table

Details on the translation and incompatibility of old and new units is located here:

[Undergraduate Translation Table](#) and [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.

Further Information

For further information about this course, please contact the following:

Richard Thomas
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Sample Structure Semesters

- [Course Structure](#)
- [Recommended Core Unit Progression](#)
- [Year 1, Semester 2](#)
- [Year 2, Semester 1](#)
- [Year 2, Semester 2](#)
- [Year 2, Summer](#)
- [Year 3, Semester 1](#)
- [Year 3, Semester 2](#)
- [Year 3, Summer](#)

Code	Title
Course Structure	
Recommended Core Unit Progression	
Year 1, Semester 2	
INB270	Programming
INB251	Networks
INB271	The Web
Intermediate Level Elective	
Year 2, Semester 1	
Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	
Year 2, Semester 2	
INB301	The Business of IT
Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	
Year 2, Summer	
INB302	IT Capstone Project
Undertaken over four (4) weeks.	
Year 3, Semester 1	
Block B or Block C Unit	

Bachelor of Information Technology - Dean's Scholars Program

Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	
INN Unit	
Year 3, Semester 2	
INN700	Introduction To Research
INN Elective	
INN Elective	
INN401	Honours Dissertation 1
Year 3, Summer	
INN402	Honours Dissertation 2
INN403	Honours Dissertation 3
INN404	Honours Dissertation 4

Handbook

Year	2013
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
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$11,900 per Semester
Total credit points	288
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Mr Mike Roggenkamp
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)).

International Subject prerequisites

- English

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 A, B or C (4,SA)).

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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-to-date 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

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 [CEED project](#) or for an [ACS Foundation scholarship](#).

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 [Cooperative Education Program](#).

Further Information

For further information about this course, please contact the following:

Course Co-ordinator

Mr Mike Roggenkamp
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Domestic 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 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-to-date 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.

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 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-to-date 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 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	
INB101	Impact of IT
INB102	Emerging Technology
INB103	Industry Insights
INB104	Building IT Systems
Year 1, Semester 2	
IT Breadth Option Unit	
IT Breadth Option Unit	
IT Breadth Option Unit	
Complementary Studies Unit	
Year 2, Semester 1	
INB201	Scalable Systems Development
[Note: INB201 can only be taken after you have completed a minimum of 36 credit points of breadth units. Please note: INB201 available semester 1 only.]	
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	
INB300	Professional Practice in IT
INB301	The Business of IT
[Note: INB300 and INB301 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	
INB302	IT Capstone Project
[Note: INB301 must be completed before enrolling in INB302.]	
IT Specialisation Option Unit	
Complementary Studies Unit	

Handbook

Year	2013
QUT code	IT23
CRICOS	012656E
Duration (full-time)	3 years
OP	1
Rank	99
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$11,900 per Semester
Total credit points	
Start months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Int. Start Months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Course Coordinator	Richard Thomas
Discipline Coordinator	

Domestic Entry requirements 2013 questionnaires have closed

Questionnaires for the 2013 intake were due to completed on the 16 November 2012 and are now closed. If you had not submitted the questionnaire and you are considering applying to study in 2014 we recommend you read the following information as a guide only as it details requirements for entry in 2013 and these may change prior to the 2014 intake. You may also wish to consider applying for the standard entry program for 2013 entry.

Prerequisites

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Additional entry requirements

In addition to applying through QTAC and you must also submit the [online Science and Engineering Dean's Scholars questionnaire](#) by the closing date.

Please note submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Closing date

Submit the [online questionnaire](#) with QUT by Friday, 16 November 2012.

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)).

International Entry requirements Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional Entry Requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available August) by the closing date.

Please Note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

International Subject prerequisites

- English

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 A, B or C (4, SA)).

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Please Note

As of 2013, all new Dean's Scholar applicants will be admitted into the standard Bachelor programs, with no accelerated studies and no pre-approved articulation to Honours degrees.

Eligibility Criteria

Applicants must:

- have completed Year 12 in the year they apply for the program, or the previous year
- have received an OP 1 (or equivalent)
- be starting university for the first time
- demonstrate leadership experience and potential
- demonstrate community participation and engagement
- apply for and gain a place in the relevant Dean's Scholars Program

If studying at QUT International College (QUTIC), applicant must have a grade point average (GPA) of at least 6.5 for the two semesters immediately before they apply for the Dean's Scholars Program.

If expecting to get an OP of 1-3, applicant should apply for consideration.

Financial Support as of 2013.

Successful applicants will receive:

- A scholarship of up to \$6,000 per annum, usually payable in 2 instalments of \$3,000 by the 2nd week of semester 1 and semester 2 of each year. The scholarship would apply for the full-time duration of the undergraduate degree, contingent upon students meeting the conditions of the program (refer to Conditions below). The total value of the scholarship is limited to \$18,000 for the 3 year programs and \$24,000 for the 4 year programs.

Conditions as of 2013.

To keep a place in the Dean's Scholars program, students must:

- maintain enrolment full-time in the eligible undergraduate course
- graduate from the Bachelor of Information Technology within 3 years of starting, except where you've taken a leave of absence approved by the Assistant Dean, or there are other extenuating circumstances
- maintain a grade point average (GPA) of at least 6.0 each semester
- meet the requirements of program completion (for example work experience and work integrated learning)
- pay any costs associated with their program that aren't covered by the scholarship, including additional and repeated units
- demonstrate adequate participation in extracurricular elements of the program.

Students can:

- apply to change their course structure under exceptional circumstances. Students must apply through their academic mentor or course coordinator, and receive prior written approval from the Assistance Dean International and Engagement.
- apply [for other scholarships and bursaries](#), including ones associated with travel, as long as they are allowed to under the conditions of the other scholarship and under our [Industry sponsored student scholarships policy](#).

Financial support prior to 2013

Domestic students offered a place in the Dean's Scholars Program will have their undergraduate HECS paid by the Faculty and those proceeding to Honours will also receive full HECS support.

International students will have one-third of their tuition fees paid by the faculty for the undergraduate and honours programs.

Students are responsible for all other costs associated with their program.

Cooperative Education Program

The Faculty's Cooperative Education Program gives you the opportunity of 6 or 12 months paid industry placement during your course where you can integrate real experience with what you are learning in your degree.

Find out more about the [Cooperative Education Program](#).

Professional Recognition

As a graduate of the Dean's Scholars Program you will be qualified for professional accreditation and employment in fields relevant to your specialisation.

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

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sf.enquiry@qut.edu.au

Domestic 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:

- 8 core units - 4 introductory units in first semester to introduce you to the breadth of information technology and its relationship to modern society. Then there are 4 advanced units spread over the rest

of your degree program to develop your professional skills in preparation for your career

- 4 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
- 4 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
- 8 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.

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 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 one breadth unit, two specialisation units and four optional 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

Bachelor of Information Technology - Dean's Scholars Program

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.

Throughout Year 3 you will undertake two specialisation units and three optional units.

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:

- 8 core units - 4 introductory units in first semester to introduce you to the breadth of information technology and its relationship to modern society. Then there are 4 advanced units spread over the rest of your degree program to develop your professional skills in preparation for your career
- 4 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
- 4 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
- 8 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.

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 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 one breadth unit, two specialisation units and four optional 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, 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.

Throughout Year 3 you will undertake two specialisation units and three optional units.

Sample Structure

Code	Title
Course Notes	
Refer to IT23 course structure.	

Handbook

Year	2013
QUT code	IX25
Duration (full-time)	4 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Total credit points	384
Credit points full-time sem.	48
Start months	February
Int. Start Months	February
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Dr Wayne Kelly

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

DISCONTINUATION

As of Semester 1 2009, IX25 has been discontinued.

Software Engineering is now available in the EN40 Bachelor of Engineering course.

Special Note

Any remaining students should seek advice from the Course Coordinator regarding their remaining course program.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Handbook

Year	2013
QUT code	LS50
Duration (full-time)	4 years
Duration (part-time)	8 years
OP	12
Rank	77
OP Guarantee	Yes
Campus	Gardens Point
Total credit points	384
Credit points full-time sem.	48
Credit points part-time sem.	24
Dom. Start Months	February
Course Coordinator	Associate Professor Chris Collet
Discipline Coordinator	

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Discontinued Course

LS50 has been discontinued and replaced by ST50. LS50 is for continuing students only.

Course Design

The Bachelor of Biotechnology Innovation, a degree with Honours, was the first degree of its type in Australia and aims to provide highly trained and motivated graduates skilled in the science and business and biotechnology. Graduates undertake the same basic and advanced biotechnology science as students in other science-based courses, gaining requisite theoretical and practical skills. In this course, however, basic and advanced business units are undertaken highlighting entrepreneurial skills and biotechnology commercialisation. Integration and synthesis of the disparate disciplines is an essential component of the course.

Unique to the course is the Student BioEnterprise Scheme, a proactive project-based learning exercise promoting the integration of theory and practice in business and science. Students form companies and operate in the company environment over the entire duration of their course. Companies invent biotechnology-oriented products or processes and formulate strategies to bring them from laboratory to the marketplace under the guidance of industry and academic mentors. Students have many opportunities to network with industry through the Student BioEnterprise Scheme and numerous Ausbiotech functions, events and conferences. Companies can also undertake industry-based or consultancy projects with an industry partner in the final year of the course.

Professional Recognition

On graduation, you will be immediately eligible for graduate membership of AusBiotech Ltd and the Australian Society

for Biochemistry and Molecular Biology (ASBMB).

Contact Details

For further information about this course, please contact:

Course Coordinator

Associate Professor Chris Collet

Phone: +61 7 3138 5173

Email: c.collet@qut.edu.au

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	
BSB115	Management
MAB101	Statistical Data Analysis 1
SCB111	Chemistry 1
Cellular Basis of Life	
Year 1, Semester 2	
BSB126	Marketing
Principles of Human Physiology	
SCB121	Chemistry 2
Cell and Molecular Biology	
Year 2, Semester 1	
AMB240	Marketing Planning and Management
LQB383	Molecular and Cellular Regulation
LQB386	Microbial Structure and Function
LSB325	Biochemistry
Year 2, Semester 2	
LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics
LQB489	Plant Physiology and Cell Biology
MGB223	Entrepreneurship and Innovation
Year 3, Semester 1	
LQB582	Biomedical Research Technologies
LQB583	Genetic Research Technology
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
Year 3, Semester 2	
BSB311	Innovation Commercialisation Strategies
LQB682	Protein Biochemistry and Bioengineering
LQB686	Microbial Technology and Immunology
MGB200	Leading Organisations

Bachelor of Biotechnology Innovation

Year 4, Semester 1

LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation
LSB709-1	Biotechnology Research Project
MGB225	Intercultural Communication and Negotiation Skills

Year 4, Semester 2

LSB709-2	Biotechnology Research Project
LSB709-3	Biotechnology Research Project
Plus any TWO of the following three units:	
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions
MGB309	Strategic Management

Handbook

Year	2013
QUT code	MA54
CRICOS	049433D
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
OP	7
Rank	87
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4600 per Semester (48 credit points)
International fee (indicative)	2013: \$12,500 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr Tim Moroney
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- 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 B (4, SA). Recommended Study: Maths C.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why Choose This Course

The course's flexible structure allows you to choose to study only mathematics units, or include some units from another area of interest, such as science, business or information technology. You will be able to design a program to suit your interests and career aspirations by combining advanced units from a number of mathematical specialisations.

Financial Support

You should consider applying for an industry-sponsored mathematics bursary to help you financially throughout your studies. For further information visit [scholarships](#).

Your Course

Year 1

You will study core units in mathematics and statistics. These core units include studies in calculus, algebra, vectors and matrices, computational mathematics, data analysis and statistical modelling.

Year 2

You will build on your core studies by advancing to more specialised topics such as advanced calculus, linear algebra, differential equations, operations research, data visualisation, statistics or modelling. Your practical assignments will tackle problems faced in the real world. You can choose to study only mathematics units or include units from another area of interest, such as science, business, information technology or a language.

Year 3

Refine your studies by combining advanced units from the following specialisations:

- applied mathematics: using mathematical techniques to solve real-world problems
- computational mathematics: using computers and numerical techniques to find solutions to complex problems which cannot be solved analytically
- discrete mathematics: the mathematics of numbers, including sets, fields, rings and groups which is used extensively in information security
- financial mathematics: applying a wide variety of mathematical techniques for use in a range of financial areas
- mathematical modelling: using mathematical techniques to develop a model or explanation of a real-world problem which can then be tested
- operations research: optimising complex systems including queuing, scheduling or allocation of resources
- scientific computation and visualisation: large-scale scientific modelling and creating graphical representations using visualisation techniques
- statistics: collecting data in an appropriate format, experimental design, analysis of data and using data to make predictions
- statistical modelling: building and analysing models of systems involving probability and variables.

Further Information

For further information about this course, please contact:

Course Coordinator

Dr Tim Moroney

Phone: +61 7 3138 8822

Email: sef.enquiry@qut.edu.au

Domestic Course structure

Your Course

Year 1

You will study core units in mathematics and statistics. These core units include studies in calculus, algebra, vectors and matrices, computational mathematics, data analysis and statistical modelling.

Year 2

You will build on your core studies by advancing to more specialised topics such as advanced calculus, linear algebra, differential equations, operations research, data visualisation, statistics or modelling. Your practical assignments will tackle problems faced in the real world. You can choose to study only mathematics units or include units from another area of interest, such as science, business, information technology or a language.

Year 3

Refine your studies by combining advanced units from the following specialisations:

- applied mathematics: using mathematical techniques to solve real-world problems
- computational mathematics: using computers and numerical techniques to find solutions to complex problems which cannot be solved analytically
- discrete mathematics: the mathematics of numbers, including sets, fields, rings and groups which is used extensively in information security
- financial mathematics: applying a wide variety of mathematical techniques for use in a range of financial areas
- mathematical modelling: using mathematical techniques to develop a model or explanation of a real-world problem which can then be tested
- operations research: optimising complex systems including queuing, scheduling or allocation of resources
- scientific computation and visualisation: large-scale scientific modelling and creating graphical representations using visualisation techniques
- statistics: collecting data in an appropriate format, experimental design, analysis of data and using data to make predictions
- statistical modelling: building and analysing models of systems involving probability and variables.

International Course structure

Your Course

Year 1

You will study core units in mathematics and statistics. These core units include studies in calculus, algebra, vectors and matrices, computational mathematics, data analysis and statistical modelling.

Year 2

You will build on your core studies by advancing to more specialised topics such as advanced calculus, linear algebra, differential equations, operations research, data visualisation, statistics or modelling. Your practical assignments will tackle problems faced in the real world. You can choose to study only mathematics units or include units from another area of interest, such as science, business, information technology or a language.

Year 3

Refine your studies by combining advanced units from the following specialisations:

- applied mathematics: using mathematical techniques to solve real-world problems
- computational mathematics: using computers and numerical techniques to find solutions to complex problems which cannot be solved analytically
- discrete mathematics: the mathematics of numbers, including sets, fields, rings and groups which is used extensively in information security
- financial mathematics: applying a wide variety of mathematical techniques for use in a range of financial areas
- mathematical modelling: using mathematical techniques to develop a model or explanation of a real-world problem which can then be tested
- operations research: optimising complex systems including queuing, scheduling or allocation of resources
- scientific computation and visualisation: large-scale scientific modelling and creating graphical representations using visualisation techniques
- statistics: collecting data in an appropriate format, experimental design, analysis of data and using data to make predictions
- statistical modelling: building and analysing models of systems involving probability and variables.

Sample Structure Semesters

- [Level 1 Mathematics Units](#)
- [Level 2 and 3 Mathematics Units](#)
- [Other Units - Complementary Studies](#)

Code	Title
Course Notes	
Students complete at least 192 credit points (16 twelve credit point units) of Mathematics units according to the following requirements:	
Level 1 Mathematics Units	
Students must complete the following Level 1 Mathematics units:	
MAB101	Statistical Data Analysis 1
OR select Level 2 or 3 Mathematical unit option (MAB101 alternate as of 2013)	
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
MAB122	Linear Algebra and Multivariable Calculus
MAB210	Probability and Stochastic Modelling 1
MAB220	Computational Mathematics 1
Note: MAB120 is for students who do not have an exit assessment of at least Sound Achievement in four semesters of both Senior Mathematics B and Senior Mathematics C. Students with at least Sound Achievement in both Mathematics B and C (or equivalent) may select a level 2 Mathematics unit instead of MAB120.	
Level 2 and 3 Mathematics Units	
At least 120 credit points (10 twelve credit point units) must be taken from Level 2 and Level 3 Mathematics units with at least 48 credit points (4 twelve credit point units) from Level 3 mathematics units	
Students must complete:	
MAB311	Advanced Calculus
MAB312	Linear Algebra
Other Units - Complementary Studies	
Up to a maximum of 96 credit points may be taken as electives with not more than 48 credit points from first level units.	

Handbook

Year	2013
QUT code	MA54
CRICOS	049433D
Duration (full-time)	3 years
OP	99
Rank	1
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4600 per Semester (48 credit points)
Start months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012.
Int. Start Months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012.
Discipline Coordinator	

Domestic Entry requirements 2013 questionnaires have closed

Questionnaires for the 2013 intake were due to completed on the 16 November 2012 and are now closed. If you had not submitted the questionnaire and you are considering applying to study in 2014 we recommend you read the following information as a guide only as it details requirements for entry in 2013 and these may change prior to the 2014 intake. You may also wish to consider applying for the standard entry program for 2013 entry.

Prerequisites

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Additional entry requirements

In addition to applying through QTAC and you must also submit the [online Science and Engineering Dean's Scholars questionnaire](#) by the closing date.

Please note submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Closing date

Submit the online questionnaire with QUT by Friday, 16 November 2012.

Domestic Assumed knowledge

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

- Maths B
- English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA) in English and very high achievement (4,VHA) in Maths B and two of Biology, Chemistry, Earth Science, Maths C or Physics.

International Subject prerequisites

- Maths B
- English

You have achieved the equivalent of four semesters at high school level (Years 11 and 12) with sound achievement (4, SA)

in English and very high achievement (4,VHA) in Maths B and two of Biology, Chemistry, Earth Science, Maths C or Physics.

Minimum english requirements

Students must meet the English proficiency requirements.

Please Note

As of 2013, all new Dean's Scholar applicants will be admitted into the standard Bachelor programs, with no accelerated studies and no pre-approved articulation to Honours degrees.

Eligibility Criteria

Applicants must:

- have completed Year 12 in the year they apply for the program, or the previous year
- have received an OP 1 (or equivalent)
- be starting university for the first time
- demonstrate leadership experience and potential
- demonstrate community participation and engagement
- apply for and gain a place in the relevant Dean's Scholars Program

If studying at QUT International College (QUTIC), applicant must have a grade point average (GPA) of at least 6.5 for the two semesters immediately before they apply for the Dean's Scholars Program.

If expecting to get an OP of 1-3, applicant should apply for consideration.

Financial Support

Successful applicants will receive:

- A scholarship of up to \$6,000 per annum, usually payable in 2 instalments of \$3,000 by the 2nd week of semester 1 and semester 2 of each year. The scholarship would apply for the full-time duration of the undergraduate degree, contingent upon students meeting the conditions of the program (refer to Conditions below). The total value of the scholarship is limited to \$18,000 for the 3 year programs and \$24,000 for the 4 year programs.

Conditions

To keep a place in the Dean's Scholars program, students must:

- maintain enrolment full-time in the eligible undergraduate course
- graduate from the Bachelor of Mathematics within 3 years of starting,

Bachelor of Mathematics - Dean's Scholars Program

except where you've taken a leave of absence approved by the Assistant Dean, or there are other extenuating circumstances

- maintain a grade point average (GPA) of at least 6.0 each semester
- meet the requirements of program completion (for example work experience and work integrated learning)
- pay any costs associated with their program that aren't covered by the scholarship, including additional and repeated units
- demonstrate adequate participation in extracurricular elements of the program.

Students can:

- apply to change their course structure under exceptional circumstances.

Students must apply through their academic mentor or course coordinator, and receive prior written approval from the Assistance Dean International and Engagement.

- apply [for other scholarships and bursaries](#), including ones associated with travel, as long as they are allowed to under the conditions of the other scholarship and under our [Industry sponsored student scholarships policy](#).

Career Outcomes

As a graduate of the Bachelor of Mathematics Dean's Scholars Program you will find employment opportunities across a wide range of areas, such as finance, investment, information technology, environmental management, health, marketing, logistics, defence, medic, 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. Development of skills in communication, problem solving, critical thinking and teamwork form an integral part of the course.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Handbook

Year	2013
QUT code	MA54 + SC60
Duration (full-time)	3 years
OP	1
Rank	99
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
Total credit points	384 (BMaths 288 cp and BAppSc(Hons) 96cp)
Credit points full-time sem.	48
Start months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Int. Start Months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Course Coordinator	Mr Richard Thomas
Discipline Coordinator	A/Prof Dann Mallet 07 3138 2354 dg.mallet@qut.edu.au

Domestic Entry requirements Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional Entry Requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available August) by the closing date.

Please Note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

Assumed knowledge includes English (4, SA) and Maths B (4, VHA) plus two (2) of Biological Science, Chemistry, Earth Science, Maths C or Physics (4, VHA)

International Entry requirements Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional Entry Requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available August) by the closing date.

Please Note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

International Subject prerequisites

- Physics
- Maths C
- Maths B
- English
- Chemistry

Subject prerequisites include English (4, SA) and Maths B (4, VHA) plus two (2) of Biological Science, Chemistry, Earth Science, Maths C or Physics (4, VHA)

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Please Note

As of 2013, all new Dean's Scholar applicants will be admitted into the standard Bachelor programs, with no accelerated studies and no pre-approved articulation to Honours degrees. Please refer to MA54 Bachelor of Mathematics Dean's Scholar Program.

Overview

The Dean's Scholars Program in Mathematics offers an enriched course of study, with an early introduction to mathematical research, for students who obtain outstanding levels of academic achievement at Secondary School. At the same time it provides the option of an accelerated pathway by which these students are able to complete the Bachelor of Mathematics course plus the Bachelor of Applied Science (Honours) course in a total of just three years.

Mathematics Dean's scholars are able to undertake research enrichment units and individually-tailored tutorial programs:

Sample Structure Semesters

- [Year 1, Semester 1 \(48 cp\)](#)

Bachelor of Mathematics & Bachelor of Applied Science (Honours) - Dean's Scholars Honours Program

- [Year 1, Semester 2 \(48 cp\)](#)
- [Year 2, Semester 1 \(48 cp\)](#)
- [Year 2, Semester 2 \(48 cp\)](#)
- [Year 3, Semester 1 \(48 cp\)](#)
- [Year 3, Semester 2 \(48 cp\)](#)
- [Year 4, Semester 1 \(48 cp\) and Semester 2 \(48 cp\)](#)
- [Notes:](#)

Code	Title
Year 1, Semester 1 (48 cp)	
Normal BMaths and BAppSc(Hons) units: BMaths Coursework (48 cp)	
Year 1, Semester 2 (48 cp)	
Dean's Scholars Program enrichment unit:	
SCB303	Tutorial Program for Dean's Scholars
Normal BMaths and BAppSc(Hons) units: BMaths Coursework (36 cp)	
Year 2, Semester 1 (48 cp)	
Dean's Scholars Program enrichment unit:	
SCB401	Research Methods for Dean's Scholars
Or other approved unit	
Normal BMaths and BAppSc(Hons) units: BMaths Coursework (36 cp)	
Year 2, Semester 2 (48 cp)	
Normal BMaths and BAppSc(Hons) units: BMaths Coursework (48 cp)	
Year 3, Semester 1 (48 cp)	
Dean's Scholars Program enrichment unit:	
SCB501-1	Research Project for Dean's Scholars
Normal BMaths and BAppSc(Hons) units: BAppSc Coursework (36 cp)	
Year 3, Semester 2 (48 cp)	
Dean's Scholars Program enrichment unit:	
SCB501-2	Research Project for Dean's Scholars
Normal BMaths and BAppSc(Hons) units: BMaths Coursework (36 cp)	
Year 4, Semester 1 (48 cp) and Semester 2 (48 cp)	
Normal BMaths and BAppSc(Hons) units: BAppSc(Hons) Coursework/Research (48 cp)	
Normal BMaths and BAppSc(Hons) units: BAppSc(Hons) Coursework/Research (48 cp)	
Notes:	
- The exact timing of Dean's Scholars Program enrichment units may be varied to suit the student's chosen program of study.	
- It is also possible to complete the program in 3.5 years using a combination of the 3 and 4 year structures. There is also flexibility for students to undertake Dean's Scholars Program enrichment units during the summer semesters between years 1 and 2, and years 2 and 3 to lighten regular semester study loads or to assist in acceleration.	

Handbook

Year	2013
QUT code	ME41
CRICOS	003490G
Duration (full-time)	4 years
Rank	80
OP Guarantee	Yes
Campus	Gardens Point
Total credit points	384
Credit points full-time sem.	48
Course Coordinator	Dr R.Mahalinga-Iyer
Discipline Coordinator	Dr Gary Chadwick

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Special Note

This course has been discontinued. Any remaining students should seek advice from the Course Coordinator regarding their remaining course program.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Handbook

Year	2013
QUT code	SC01
CRICOS	003502J
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July 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	February, July 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

Domestic Assumed knowledge

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

- Maths B
- 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 B (4, SA)). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science or Maths C.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [ST01 Bachelor of Science](#). Please contact sef.enquiry@qut.edu.au 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 [Dr Marion Bateson](#).

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	2013
QUT code	SC01
CRICOS	003502J
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July 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	February, July 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
Discipline Coordinator	Dr Perry Hartfield +61 7 3138 2984 (Alternate phone: +61 7 3138 8822) p.hartfield@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

- Maths B
- 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 B (4, SA)). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science or Maths C.

International Entry requirements

Recommended Study

Chemistry and Biological Science

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [ST01 Bachelor of Science](#). Please contact sef.enquiry@qut.edu.au for any enquiries.

Career Outcomes

Strong employment opportunities for biochemists exist around the world in both the private and government sectors of industry. QUT graduates skilled in biochemistry can find career opportunities

in diagnostic and analytical laboratories, universities, hospitals and health departments, pharmaceutical companies, primary and agricultural industries and departments, food industry laboratories, environmental agencies, and veterinary pathology laboratories. Alternative career paths in the marketing and sales of biotechnology equipment or commercialisation and management of biological products and processes are available.

For those wishing to enter research in honours and PhD programs, biochemistry offers a huge scope of intriguing and intellectually rewarding projects.

Professional Recognition

Graduates are eligible for membership of the Australian Society for Biochemistry and Molecular Biology (ASBMB), and in some cases the Australasian Association of Clinical Biochemists (AACB).

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. Following these introductory studies you should be in a position to confirm your choice of a major area of study.

Year 2

You will build on the concepts introduced in first year and you will consider molecular interactions in cell metabolism and function and the flow of energy and information within the cell.

Year 3

You will encounter current experimental theory and practice in biochemistry, including the exciting new developments in molecular modelling, metabolism and proteomics. You will be provided with knowledge and analytical skills that will serve you well in the workforce or lead to further study.

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. Following these

Bachelor of Applied Science (Biochemistry)

introductory studies you should be in a position to confirm your choice of a major area of study.

Year 2

You will build on the concepts introduced in first year and you will consider molecular interactions in cell metabolism and function and the flow of energy and information within the cell.

Year 3

You will encounter current experimental theory and practice in biochemistry, including the exciting new developments in molecular modelling, metabolism and proteomics. You will be provided with knowledge and analytical skills that will serve you well in the workforce or lead to further study.

Sample Structure Semesters

- [Year 1, Semester 1](#)
- [Year 1, Semester 2 \(Life Sciences Pre-Major Strand\)](#)
- [Year 2, Semester 1](#)
- [Year 2 Semester 2 *](#)
- [Year 3, Semester 1 *](#)
- [Year 3, Semester 2 *](#)
- [Recommended Second Majors:](#)
- [* Elective Unit for all Majors except Forensic Science:](#)

Code	Title
Year 1, Semester 1	
SCB110	Science Concepts and Global Systems
OR (after 2012)	
SC01 Selective*	
[*See "Science Selective Units" options on e-Student or refer to list at the bottom of the page.]	
SCB111	Chemistry 1
OR (after Semester 1 2013)	
CVB101	General Chemistry
[Please note CVB101 is only offered in semester 2.]	
Cellular Basis of Life	
OR (after 2012)	
LQB182	Human Cell & Molecular Biology
Select ONE unit from:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
1. Students without a Sound Achievement (4 semesters) in Maths A should enrol in MAB105.	
2. Students with a Sound Achievement in Maths B and NOT wishing to major in Physics should enrol in MAB101.	
3. Students with a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB121.	

4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB120.	
5. Students without a Sound Achievement in Maths B or Maths A should consult with the course coordinator.	
Year 1, Semester 2 (Life Sciences Pre-Major Strand)	
SCB120	Plant and Animal Physiology
[Note: students taking forensic science or chemistry second majors should replace SCB120 Plant and Animal Physiology with SCB131 Experimental Chemistry].	
OR (after 2012)	
LSB258	Principles of Human Physiology
OR	
LSB142	Human Anatomy and Physiology
[Please note LSB142 is only offered in semester 1.]	
SCB121	Chemistry 2
OR (after Semester 1 2013)	
CVB102	Chemical Structure and Reactivity
Cell and Molecular Biology	
OR (after 2012)	
LQB281	Human Health & Disease Concepts
[Students who have already completed SCB112, must do LQB182 instead of LQB281.]	
SCB123	Physical Science Applications
OR (after 2012)	
PCB150	Biomedical Physics
Year 2, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
Plus TWO other units selected according to the second major requirements	
Year 2 Semester 2 *	
LQB481	Biochemical Pathways and Metabolism
LQB483	Molecular Biology Techniques
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 1 *	
LQB581	Functional Biochemistry
LQB582	Biomedical Research Technologies
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 2 *	
LQB681	Biochemical Research Skills
LQB682	Protein Biochemistry and Bioengineering
Plus TWO other units selected according to the second major requirements	
Recommended Second Majors:	
Biotechnology, Chemistry, Forensic Science, Life Science Technologies, Microbiology	
* Elective Unit for all Majors except Forensic Science:	
SCB500	Industry Project
SCB500 Industry Project is a unit that will be offered as an elective in all majors. This unit requires 84 credit points of Level 2 and/or 3 Science units, so it may only be taken at the completion of Year 2 in Summer or during Year 3.	

Handbook

Year	2013
QUT code	SC01
CRICOS	003502J
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July 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	February, July 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
Discipline Coordinator	Dr Marion Bateson +61 7 3138 1269 (Alternate phone: +61 7 3138 8822) m.bateson@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

- Maths B
- 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 B (4, SA)). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science or Maths C.

International Entry requirements

Recommended Study

Biological Science and Chemistry.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [ST01 Bachelor of Science](#). Please contact sef.enquiry@qut.edu.au for any enquiries.

Career Outcomes

As a QUT biotechnology graduate you will have a wide range of exciting career opportunities available to you across a number of existing and emerging global industries. New career opportunities

include nanotechnology, proteomics, materials science, molecular farming and bioinformatics. Our biotechnology graduates find career opportunities in medical and agricultural research, product development or marketing, hospitals and diagnostic laboratories, in teaching and in many areas of government and private industry.

Professional Recognition

Graduates are eligible for membership of AusBiotech Ltd, Australian Society for Biochemistry and Molecular Biology (ASBMB) and, depending on unit selection, Australian Society for Medical Research (ASMR) and the Australian Society for Microbiology (ASM).

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 be introduced to the structure and function of DNA, RNA and proteins, and their role in cell function. Following these introductory studies you should be in a position to confirm your choice of a major area of study.

Year 2

You will develop a more detailed understanding of biochemical principles, cell biology and the structure and function of biomolecules. A strong focus is placed on developing practical skills in molecular biology and cell culture that will underpin your future studies. You will have access to real-world molecular biology laboratories with modern equipment and highly skilled tutors. You will also be introduced to bioinformatics through hands-on computer-based exercises.

Year 3

You will further develop both theoretical and practical skills in DNA manipulation and genetic engineering as well as advanced bioinformatics. You will also focus on specific applications in biotechnology including current advances in diagnostics and detection, cell culture and tissue engineering in both animal and plant systems, functional genomics, proteomics and microarray technology. Teaching approaches at this level will encourage critical thinking, and problem-based learning, and you will undertake a mix of independent activities and group work.

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 be introduced to the structure and function of DNA, RNA and proteins, and their role in cell function. Following these introductory studies you should be in a position to confirm your choice of a major area of study.

Year 2

You will develop a more detailed understanding of biochemical principles, cell biology and the structure and function of biomolecules. A strong focus is placed on developing practical skills in molecular biology and cell culture that will underpin your future studies. You will have access to real-world molecular biology laboratories with modern equipment and highly skilled tutors. You will also be introduced to bioinformatics through hands-on computer-based exercises.

Year 3

You will further develop both theoretical and practical skills in DNA manipulation and genetic engineering as well as advanced bioinformatics. You will also focus on specific applications in biotechnology including current advances in diagnostics and detection, cell culture and tissue engineering in both animal and plant systems, functional genomics, proteomics and microarray technology. Teaching approaches at this level will encourage critical thinking, and problem-based learning, and you will undertake a mix of independent activities and group work.

Sample Structure Semesters

- [Year 1, Semester 1](#)
- [Year 1, Semester 2 \(Life Sciences Pre-Major Strand\)](#)
- [Year 2, Semester 1](#)
- [Year 2, Semester 2 *](#)
- [Year 3, Semester 1 *](#)
- [Year 3, Semester 2 *](#)
- [Recommended Second Majors:](#)
- [* Elective Unit for all Majors except Forensic Science:](#)

Code	Title
Year 1, Semester 1	
SCB110	Science Concepts and Global Systems
OR (after 2012)	

SC01 Selective*	
[*See "Science Selective Units" options on e-Student or refer to list at the bottom of the page.]	
SCB111	Chemistry 1
OR (after Semester 1 2013)	
CVB101	General Chemistry
[Please note CVB101 is only offered in semester 2.]	
Cellular Basis of Life	
OR (after 2012)	
LQB182	Human Cell & Molecular Biology
Select ONE unit from:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
1. Students without a Sound Achievement (4 semesters) in Maths A should enrol in MAB105.	
3. Students with a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB121.	
2. Students with a Sound Achievement in Maths B and NOT wishing to major in Physics should enrol in MAB101.	
4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB120.	
5. Students without a Sound Achievement in Maths B or Maths A should consult with the course coordinator.	
Year 1, Semester 2 (Life Sciences Pre-Major Strand)	
SCB120	Plant and Animal Physiology
[Note: students taking forensic science or chemistry second majors should replace SCB120 Plant and Animal Physiology with SCB131 Experimental Chemistry].	
OR (after 2012)	
LSB258	Principles of Human Physiology
OR	
LSB142	Human Anatomy and Physiology
[Please note LSB142 is only offered in semester 1.]	
SCB121	Chemistry 2
OR (after Semester 1 2013)	
CVB102	Chemical Structure and Reactivity
Cell and Molecular Biology	
OR (after 2012)	
LQB281	Human Health & Disease Concepts
[Students who have already completed SCB112, must do LQB182 instead of LQB281.]	
SCB123	Physical Science Applications
OR (after 2012)	
PCB150	Biomedical Physics
Year 2, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
Plus TWO other units selected according to the second major requirements	
Year 2, Semester 2 *	
LQB483	Molecular Biology Techniques

LQB484	Introduction to Genomics and Bioinformatics
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 1 *	
Select TWO units from:	
LQB583	Genetic Research Technology
LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 2 *	
Select TWO units from:	
LQB682	Protein Biochemistry and Bioengineering
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions
Plus TWO other units selected according to the second major requirements	
Recommended Second Majors:	
Biochemistry, Chemistry, Forensic Science, Life Science Technologies, Microbiology	
* Elective Unit for all Majors except Forensic Science:	
SCB500	Industry Project
SCB500 Industry Project is a unit that will be offered as an elective in all majors. This unit requires 84 credit points of Level 2 and/or 3 Science units, so it may only be taken at the completion of Year 2 in Summer or during Year 3.	

Handbook

Year	2013
QUT code	SC01
CRICOS	003502J
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July 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	February, July 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
Discipline Coordinator	Associate Professor Dennis Arnold +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 [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.

Deferment

Whilst deferment available it is mostly likely deferred students will commence [ST01 Bachelor of Science](#) in 2014.

Domestic Assumed knowledge

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

- Maths B
- 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 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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [ST01 Bachelor of Science](#). 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 Institute (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 sub-disciplines 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.

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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 sub-disciplines 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.

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Sample Structure Semesters

- [Year 1, Semester 1](#)
- [Year 1, Semester 2 \(Chemistry Pre-Major Strand\)](#)
- [Year 2, Semester 1](#)
- [Year 2, Semester 2 *](#)
- [Year 3, Semester 1 *](#)
- [Year 3, Semester 2 *](#)
- [Recommended Second Majors:](#)
- [* Elective Unit for all Majors except Forensic Science:](#)

Code	Title
Year 1, Semester 1	
SCB110	Science Concepts and Global Systems
OR (after 2012)	
SC01 Selective*	
[*See "Science Selective Units" options on e-Student or refer to list at the bottom of the page.]	
SCB111	Chemistry 1
OR (after Semester 1 2013)	
CVB101	General Chemistry
[Please note CVB101 is only offered in semester 2.]	
Cellular Basis of Life	
OR (after 2012)	
LQB182	Human Cell & Molecular Biology
OR	
BVB101	Foundations of Biology
[BVB101 is highly recommended for Ecology major and Environmental Science major students. Please note: BVB101 is only offered in Semester 2.]	
Plus ONE of:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
1. Students without a Sound Achievement (4 semesters) in Maths A should enrol in MAB105.	

2. Students with a Sound Achievement in Maths B and NOT wishing to major in Physics should enrol in MAB101.

3. Students with a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB121.

4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB120.

5. Students without a Sound Achievement in Maths B or Maths A should consult with the course coordinator.

Year 1, Semester 2 (Chemistry Pre-Major Strand)

SCB121	Chemistry 2
OR (after Semester 1 2013)	
CVB102	Chemical Structure and Reactivity
SCB123	Physical Science Applications
OR (after 2012)	
PVB102	Physics of the Very Small
SCB131	Experimental Chemistry

Plus either

MAB120	Foundations of Calculus and Algebra
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Or

Cell and Molecular Biology

Note: MAB120 is the preferred option for the Chemistry major. Only students taking Forensic Science, Microbiology, Biochemistry or Biotechnology as a second major should select SCB122 Cell and Molecular Biology

Year 2, Semester 1

PQB312	Analytical Chemistry For Scientists and Technologists
PQB331	Structure and Bonding

Plus TWO other units selected according to the second major requirements

Year 2, Semester 2 *

PQB401	Reaction Kinetics, Thermodynamics and Mechanisms
PQB442	Chemical Spectroscopy

Plus TWO other units selected according to the second major requirements

Year 3, Semester 1 *

PQB502	Advanced Physical Chemistry
PQB531	Organic Mechanisms and Synthesis

Plus TWO other units selected according to the second major requirements

Year 3, Semester 2 *

PQB631	Advanced Inorganic Chemistry
PQB642	Chemical Research

Plus TWO other units selected according to the second major requirements

Recommended Second Majors:

Biochemistry, Biotechnology, Chemistry for Industry, Forensic Science

* Elective Unit for all Majors except Forensic Science:

SCB500	Industry Project
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SCB500 Industry Project is a unit that will be offered as an elective in all majors. This unit requires 84 credit points of Level 2 and/or 3 Science units, so it may only be taken at the completion of Year 2 in Summer or during Year 3.

Handbook

Year	2013
QUT code	SC01
CRICOS	003502J
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
Rank	72
OP Guarantee	Yes
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July 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	February, July 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
Discipline Coordinator	Dr Ian Williamson +61 7 3138 2779 (Alternate phone: +61 7 3138 8822) i.williamson@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

- Maths B
- 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 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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [ST01 Bachelor of Science](#). Please contact sef.enquiry@qut.edu.au for any enquiries.

Career Outcomes

Ecologists find rewarding careers in research and monitoring with government departments responsible for sustainability, wildlife conservation and national parks, primary industries, pest management,

fisheries, forestry and museums. They also find work in private firms engaged in research and consultancy. Positions include conservation officer, sustainable resources officer, wildlife manager, fisheries biologist, scientific or technical officer, teacher or research scientist. Employment in more specialised areas is available, usually requiring study beyond the first degree.

Professional Recognition

Professional recognition is achieved through membership of a scientific society, for example, the Ecological Society of Australia (ESA) or the Australian Wildlife Management Society (AWMS) and participation in its meetings and professional activities.

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 gain key basic knowledge about the natural systems that exist on plant earth and the way these systems interact.

Year 2

You will focus on background concepts important for understanding ecology and the environment. You will examine in detail the fundamental concepts in ecology and evolution, and the basic processes important in the formation of the physical environment that are fundamental to understanding natural resource systems. You will learn about the dynamics of plant and animal populations and the interactions that influence them, and the basic methods used to describe and monitor populations. A background in fundamental genetics and evolution will provide the framework for understanding and interpreting variation in biological systems. You will expand on basic concepts of data handling and analysis so that you have a sound knowledge of experimental design and its application to experimental studies in ecology and environmental science. You will also learn how to design and conduct ecological field studies and analyse and communicate information.

Year 3

The fundamental knowledge of ecology, evolution and experimental design is extended to develop the theoretical and applied knowledge used by practising

Bachelor of Applied Science (Ecology)

ecologists. You will cover in detail the three main areas where ecology is applied – approaches to the conservation of rare and endangered species and ecosystems, the management of invasives and other pest species, and the sustainable exploitation of wild populations. These aspects are also covered in guest lectures by industry professionals, and by involving you in detailed case studies and field projects that examine particular management questions in ecology.

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 gain key basic knowledge about the natural systems that exist on plant earth and the way these systems interact.

Year 2

You will focus on background concepts important for understanding ecology and the environment. You will examine in detail the fundamental concepts in ecology and evolution, and the basic processes important in the formation of the physical environment that are fundamental to understanding natural resource systems. You will learn about the dynamics of plant and animal populations and the interactions that influence them, and the basic methods used to describe and monitor populations. A background in fundamental genetics and evolution will provide the framework for understanding and interpreting variation in biological systems. You will expand on basic concepts of data handling and analysis so that you have a sound knowledge of experimental design and its application to experimental studies in ecology and environmental science. You will also learn how to design and conduct ecological field studies and analyse and communicate information.

Year 3

The fundamental knowledge of ecology, evolution and experimental design is extended to develop the theoretical and applied knowledge used by practising ecologists. You will cover in detail the three main areas where ecology is applied – approaches to the conservation of rare and endangered species and ecosystems, the management of invasives and other pest species, and the sustainable exploitation of wild

populations. These aspects are also covered in guest lectures by industry professionals, and by involving you in detailed case studies and field projects that examine particular management questions in ecology.

Sample Structure Semesters

- [Year 1, Semester 1](#)
- [Year 1, Semester 2 \(Ecology and Environmental Science Pre-Major Strand\)](#)
- [Year 2, Semester 1](#)
- [Year 2, Semester 2 *](#)
- [Year 3, Semester 1 *](#)
- [Year 3, Semester 2 *](#)
- [Recommended Second Majors:](#)
- [* Elective Unit for all Majors except Forensic Science:](#)

Code	Title
Year 1, Semester 1	
SCB110	Science Concepts and Global Systems
OR (after 2012)	
SC01 Selective*	
[*See "Science Selective Units" options on e-Student or refer to list at the bottom of the page.]	
SCB111	Chemistry 1
OR (after Semester 1 2013)	
CVB101	General Chemistry
[Please note CVB101 is only offered in semester 2.]	
Cellular Basis of Life	
OR (after 2012)	
BVB101	Foundations of Biology
OR	
LQB182	Human Cell & Molecular Biology
[BVB101 is highly recommended for Ecology major and Environmental Science major students. Please note: BVB101 is only offered in Semester 2.]	
Plus ONE of:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
1. Students with a Sound Achievement (4 semesters) in Maths A should enrol in MAB105.	
2. Students with a Sound Achievement in Maths B and NOT wishing to major in Physics should enrol in MAB101.	
3. Students with a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB121.	
4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB120.	
5. Students without a Sound Achievement in Maths B or Maths A should consult with the course coordinator.	
Year 1, Semester 2 (Ecology and Environmental Science Pre-Major Strand)	

NQB201	Planet Earth
OR (after 2012)	
ERB101	Earth Systems
NQB202	History of Life on Earth
OR (after 2012)	
BVB102	Evolution
[Students who have already completed NQB422, must do EVB102 instead of BVB102.]	
SCB120	Plant and Animal Physiology
OR (after 2012)	
NQB423	Vertebrate Biology
OR	
NQB323	Plant Biology
[Please note NQB323 is only offered in semester 1.]	
Plus ONE of:	
ERB102	Evolving Earth
EVB102	Ecosystems and the Environment
PVB101	Physics of the Very Large
Cell and Molecular Biology	
SCB123	Physical Science Applications
SCB121	Chemistry 2
OR (after 2012)	
CVB102	Chemical Structure and Reactivity
Year 2, Semester 1	
NQB321	Ecology
Plus ONE of:	
NQB302	Earth Surface Systems
NQB322	Invertebrate Biology
NQB323	Plant Biology
Plus TWO other units selected according to the second major requirements	
Year 2, Semester 2 *	
NQB421	Experimental Design
NQB422	Genetics and Evolution
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 1 *	
NQB521	Population Genetics and Molecular Ecology
NQB523	Population Management
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 2 *	
NQB622	Conservation Biology
NQB623	Ecological Systems
Plus TWO other units selected according to the second major requirements	
Recommended Second Majors:	
Biodiversity, Environmental Science	
* Elective Unit for all Majors except Forensic Science:	
SCB500	Industry Project
SCB500 Industry Project is a unit that will be offered as an elective in all majors. This unit requires 84 credit points of Level 2 and/or 3 Science units, so it may only be taken at the completion of Year 2 in Summer or during Year 3.	

Handbook

Year	2013
QUT code	SC01
CRICOS	003502J
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July 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	February, July 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
Discipline Coordinator	Dr Ian Williamson +61 7 3138 2779 (Alternate phone: +61 7 3138 8822) i.williamson@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

- Maths B
- 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 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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [ST01 Bachelor of Science](#). Please contact sef.enquiry@qut.edu.au for any enquiries.

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,

in local councils, in consultancy, and in 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 (EIANZ) and a variety of other scientific societies, including the Soil Science Society of Australia (SSSA) and the Ecological Society of Australia (ESA).

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 be provided with a good introduction to environmental science issues and scientific problem solving as well as a basic knowledge about the natural systems that exist on plant earth and the way these systems interact. 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 understanding and investigating earth surface systems and processes both in the laboratory and in the field. At the same time, you will be introduced to the design of field and laboratory experiments and you will have the option to pursue a more ecologically or geologically oriented direction. You will then be introduced to elements of environmental chemistry in air, water and soil, including a number of field trips.

Year 3

You will receive more advanced training

Bachelor of Applied Science (Environmental Science)

in the essential areas of environmental systems and how we can model them, and you will survey and map natural resources during field trips. You will be introduced to the use of spatial science to assess and map environmental systems using geographic information systems and remote sensing. Case studies and problem-solving methods are used to introduce you to a wide variety of issues in sustainable management.

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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 be provided with a good introduction to environmental science issues and scientific problem solving as well as a basic knowledge about the natural systems that exist on plant earth and the way these systems interact. 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 understanding and investigating earth surface systems and processes both in the laboratory and in the field. At the same time, you will be introduced to the design of field and laboratory experiments and you will have the option to pursue a more ecologically or geologically oriented direction. You will then be introduced to elements of environmental chemistry in air, water and soil, including a number of field trips.

Year 3

You will receive more advanced training in the essential areas of environmental systems and how we can model them, and you will survey and map natural resources during field trips. You will be introduced to the use of spatial science to assess and map environmental systems using geographic information systems and remote sensing. Case studies and problem-solving methods are used to introduce you to a wide variety of issues in sustainable management.

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Sample Structure Semesters

- [Year 1, Semester 1](#)
- [Year 1, Semester 2 \(Ecology and Environmental Science Pre-Major Strand\)](#)
- [Year 2, Semester 1](#)
- [Year 2, Semester 2 *](#)
- [Year 3, Semester 1 *](#)
- [Year 3, Semester 2 *](#)
- [Recommended Second Majors:](#)
- [* Elective Unit for all Majors except Forensic Science:](#)

Code	Title
Year 1, Semester 1	
SCB110	Science Concepts and Global Systems
OR (after 2012)	
SC01 Selective*	
[*See "Science Selective Units" options on e-Student or refer to list at the bottom of the page.]	
SCB111	Chemistry 1
OR (after Semester 1 2013)	
CVB101	General Chemistry
[Please note CVB101 is only offered in semester 2.]	
Cellular Basis of Life	
OR (after 2012)	
BVB101	Foundations of Biology
OR	
LQB182	Human Cell & Molecular Biology
[BVB101 is highly recommended for Ecology major and Environmental Science major students. Please note: BVB101 is only offered in Semester 2.]	
Plus ONE of:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
1. Students with a Sound Achievement (4 semesters) in Maths A should enrol in MAB105.	
2. Students with a Sound Achievement in Maths B and NOT wishing to major in Physics should enrol in MAB101.	
3. Students with a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB121.	
4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB120.	
5. Students without a Sound Achievement in Maths B or Maths A should consult with the course coordinator.	
Year 1, Semester 2 (Ecology and Environmental Science Pre-Major Strand)	
NQB201	Planet Earth
OR (after 2012)	
ERB101	Earth Systems
NQB202	History of Life on Earth
OR (after 2012)	
EVB102	Ecosystems and the Environment

SCB120	Plant and Animal Physiology
OR (after 2012)	
NQB423	Vertebrate Biology
OR	
NQB323	Plant Biology
[Please note NQB323 is only offered in semester 1.]	
Plus ONE of:	
BVB102	Evolution
ERB102	Evolving Earth
PVB101	Physics of the Very Large
Cell and Molecular Biology	
SCB123	Physical Science Applications
SCB121	Chemistry 2
OR (after 2012)	
CVB102	Chemical Structure and Reactivity
Year 2, Semester 1	
NQB302	Earth Surface Systems
NQB321	Ecology
Plus TWO other units selected according to the second major requirements	
Year 2, Semester 2 *	
NQB403	Soils and the Environment
NQB421	Experimental Design
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 1 *	
NQB501	Environmental Modelling
NQB502	Field Methods in Natural Resource Sciences
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 2 *	
NQB601	Sustainable Environmental Management
Plus either	
NQB614	Groundwater Systems
Or	
NQB623	Ecological Systems
Plus TWO other units selected according to the second major requirements	
Recommended Second Majors:	
Biodiversity, Ecology, Geoscience	
* Elective Unit for all Majors except Forensic Science:	
SCB500	Industry Project
SCB500 Industry Project is a unit that will be offered as an elective in all majors. This unit requires 84 credit points of Level 2 and/or 3 Science units, so it may only be taken at the completion of Year 2 in Summer or during Year 3.	

Handbook

Year	2013
QUT code	SC01
CRICOS	003502J
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	288
Credit points full-time sem.	48
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Start months	February, July 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	February, July 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
Discipline Coordinator	Dr Emad Kiriakous +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

- Maths B
- 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 B (4, SA)). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science or Maths C.

International Entry requirements

Recommended Study

Biological Science and Chemistry

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [ST01 Bachelor of Science](#). Please contact sef.enquiry@qut.edu.au for any enquiries.

Career Outcomes

Forensic science work is popular, rewarding and highly competitive. Generally it involves employment in laboratories handling criminal casework in areas including forensic biology,

chemistry, and toxicology. Crime scene investigation is another interesting profession which may be attained by joining the police force.

Professional Recognition

Graduates who complete the forensic science major in conjunction with a life science major in biochemistry, biotechnology or microbiology are eligible for membership of the Australian and New Zealand Forensic Society (ANZFSS), AusBiotech Ltd, and the Australian Society for Biochemistry and Molecular Biology (ASBMB).

Graduates who complete the forensic science major in conjunction with the chemistry major are eligible for membership of the Australian and New Zealand Forensic Science Society (ANZFSS) and the Royal Australian Chemical Institute (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. Following these introductory studies you should be in a position to confirm your choice of major area of study.

Year 2

Your forensic studies program begins with an introduction to crime scenes and your lectures will be accompanied by laboratory work including mock crime scenes. You will learn about the legal aspects of forensic science, and take a big picture approach to the nature and analysis of physical and biological evidence. You can expand your knowledge through dedicated units in forensic evidence, analytical chemistry and biological methods of analysis.

Year 3

You will build upon your previous studies to further develop your knowledge and skills in areas of crime scene investigation such as forensic photography and fingerprinting as well as interpretation of physical evidence. You will learn about the sophisticated instrumentation and interpretation of results used in the analysis of drugs, poisons and DNA. Hand-on laboratory sessions will provide knowledge of expanded applications in advanced forensic analysis and toxicology. All theory is complemented

Bachelor of Applied Science (Forensic Science)

and supplemented by focused workshops and laboratory classes.

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. Following these introductory studies you should be in a position to confirm your choice of major area of study.

Year 2

Your forensic studies program begins with an introduction to crime scenes and your lectures will be accompanied by laboratory work including mock crime scenes. You will learn about the legal aspects of forensic science, and take a big picture approach to the nature and analysis of physical and biological evidence. You can expand your knowledge through dedicated units in forensic evidence, analytical chemistry and biological methods of analysis.

Year 3

You will build upon your previous studies to further develop your knowledge and skills in areas of crime scene investigation such as forensic photography and fingerprinting as well as interpretation of physical evidence. You will learn about the sophisticated instrumentation and interpretation of results used in the analysis of drugs, poisons and DNA. Hand-on laboratory sessions will provide knowledge of expanded applications in advanced forensic analysis and toxicology. All theory is complemented and supplemented by focused workshops and laboratory classes.

Sample Structure Semesters

- [Note: Must be taken as a double major with Biochemistry, Biotechnology, Chemistry or Microbiology](#)
- [Year 1, Semester 1](#)
- [Year 1, Semester 2 \(Forensic Science Pre-Major Strand\)](#)
- [Year 2, Semester 1](#)
- [Year 2, Semester 2 *](#)
- [Year 3, Semester 1 *](#)
- [Year 3, Semester 2 *](#)

Code	Title
Note: Must be taken as a double major with Biochemistry, Biotechnology, Chemistry or Microbiology	
Year 1, Semester 1	

SCB110	Science Concepts and Global Systems
OR (after 2012)	
SC01 Selective*	
[*See "Science Selective Units" options on e-Student or refer to list at the bottom of the page]	
SCB111	Chemistry 1
OR (after Semester 1 2013)	
CVB101	General Chemistry
[Please note CVB101 is only offered in semester 2.]	
Cellular Basis of Life	
OR (after 2012)	
LQB182	Human Cell & Molecular Biology
Plus ONE of:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
1. Students with a Sound Achievement (4 semesters) in Maths A should enrol in MAB105.	
2. Students with a Sound Achievement in Maths B and NOT wishing to major in Physics should enrol in MAB101.	
3. Students with a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB121.	
4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB120.	
5. Students without a Sound Achievement in Maths B or Maths A should consult with the course coordinator.	
Year 1, Semester 2 (Forensic Science Pre-Major Strand)	
SCB121	Chemistry 2
OR (after Semester 1 2013)	
CVB102	Chemical Structure and Reactivity
SCB131	Experimental Chemistry
Cell and Molecular Biology	
OR (after 2012)	
LQB281	Human Health & Disease Concepts
[Students who have already completed SCB112, must do LQB182 instead of LQB281.]	
SCB123	Physical Science Applications
OR (after 2012)	
PVB102	Physics of the Very Small
Year 2, Semester 1	
LQB383	Molecular and Cellular Regulation
SCB384	Forensic Sciences - From Crime Scene to Court
Plus TWO other units selected according to the second major requirements	
Year 2, Semester 2 *	
PQB680	Forensic DNA Profiling
(LQB680 changed to PQB680 in 2013.)	
PQB312	Analytical Chemistry For Scientists and Technologists
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 1 *	
PQB513	Instrumental Analysis

PQB584	Forensic Physical Evidence
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 2 *	
PQB684	Forensic Analysis
JSB173	Understanding the Criminal Justice System
OR (prior to 2012)	
Forensic Scientific Evidence	
Plus TWO other units selected according to the second major requirements	
Certain units in this major may also be listed for your second major. You must take a suitable replacement unit as each unit may only be counted towards one major. Please contact your discipline coordinator to obtain a list of suitable "extra" units.	

Handbook

Year	2013
QUT code	SC01
CRICOS	003502J
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July 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	February, July 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
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

- Maths B
- 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 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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [ST01 Bachelor of Science](#). 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 hydrogeology-environmental industries. You will be introduced to techniques and case

Bachelor of Applied Science (Geoscience)

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 computer-based 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 hydrogeology-environmental 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 computer-based geographical information systems.

Sample Structure Semesters

- [Year 1, Semester 1](#)
- [Year 1, Semester 2 \(Geoscience Pre-Major Strand\)](#)
- [Year 2, Semester 1](#)
- [Year 2, Semester 2 *](#)
- [Year 3, Semester 1 *](#)
- [Year 3, Semester 2 *](#)

- [Recommended Second Majors:](#)
- [* Elective Unit for all Majors except Forensic Science:](#)

Code	Title
Year 1, Semester 1	
SCB110	Science Concepts and Global Systems
OR (after 2012)	
SC01 Selective*	
[*See "Science Selective Units" options on e-Student or refer to list at the bottom of the page]	
SCB111	Chemistry 1
OR (after Semester 1 2013)	
CVB101	General Chemistry
[Please note CVB101 is only offered in semester 2.]	
Cellular Basis of Life	
OR (after 2012)	
LQB182	Human Cell & Molecular Biology
OR	
BVB101	Foundations of Biology
[BVB101 is highly recommended for Ecology major and Environmental Science major students. Please note: BVB101 is only offered in Semester 2.]	
Plus ONE of:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
1. Students with a Sound Achievement (4 semesters) in Maths A should enrol in MAB105	
2. Students with a Sound Achievement in Maths B and NOT wishing to major in Physics should enrol in MAB101.	
3. Students with a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB121.	
4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB120.	
5. Students without a Sound Achievement in Maths B or Maths A should consult with the course coordinator.	
Year 1, Semester 2 (Geoscience Pre-Major Strand)	
NQB201	Planet Earth
OR (after 2012)	
ERB101	Earth Systems
NQB202	History of Life on Earth
OR (after 2012)	
ERB102	Evolving Earth
SCB123	Physical Science Applications
OR (after 2012)	
PVB101	Physics of the Very Large
SCB222	Exploration of the Universe
OR (after 2012)	
SC01 Selective*	
[*See "Science Selective Units" options on e-Student or refer to list at the bottom of the page]	
Year 2, Semester 1	
NQB311	Mineralogy

NQB314	Sedimentary Geology
Plus TWO other units selected according to the second major requirements	
Year 2, Semester 2 *	
NQB411	Petrology of Igneous and Metamorphic Rocks
NQB412	Structural Geology and Field Methods
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 1 *	
NQB502	Field Methods in Natural Resource Sciences
NQB513	Geophysics
NQB615	Geochemistry
Plus ONE other unit selected according to the second major requirements	
Year 3, Semester 2 *	
ONE of	
NQB612	Basin Analysis and Petroleum Geology
NQB613	Plate Tectonics
NQB614	Groundwater Systems
Plus THREE other units selected according to the second major requirements	
Recommended Second Majors:	
Applied Geology, Environmental Science, Physics	
* Elective Unit for all Majors except Forensic Science:	
SCB500	Industry Project
SCB500 Industry Project is a unit that will be offered as an elective in all majors. This unit requires 84 credit points of Level 2 and/or 3 Science units, so it may only be taken at the completion of Year 2 in Summer or during Year 3.	

Handbook

Year	2013
QUT code	SC01
CRICOS	003502J
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July 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	February, July 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
Discipline Coordinator	Dr Christine Knox +61 7 3138 8822 c.knox@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

- Maths B
- 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 B (4, SA)). Recommended Study: At least one of Chemistry, Physics, Biology, Earth Science or Maths C.

International Entry requirements

Recommended Study

Biological Science and Chemistry.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [ST01 Bachelor of Science](#). Please contact sef.enquiry@qut.edu.au for any enquiries.

Career Outcomes

Microbiology graduates find employment in a variety of interesting careers. Many microbiologists are employed by human pathology laboratories with the departments of bacteriology, immunology,

mycology, parasitology and virology. You may also find employment in laboratories testing for animal and plant diseases, or testing for pathogens or spoilage organisms in food, air, water and soils. Microbiologists can also be employed as metabolic engineers developing microbial production systems.

If working in a laboratory is not for you then there are positions available as technical product and sales representatives, intellectual property specialists/patent attorneys, or even with scientific publishers. Many microbiologists find employment within government departments such as Health, Employment, Economic Development and Innovation, and Environment and Resource Management.

If you wish to study for a higher research degree, you may pursue a research career in university, government or private research laboratories.

Professional Recognition

Graduates are eligible for membership of the Australian Society for Microbiology (ASM).

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. Following these introductory studies you should be in a position to confirm your choice of major area of study.

Year 2

You will be introduced to diverse micro-organisms and study how they have evolved, their structure, how they obtain nutrients and how they grow and reproduce. Importantly you will also learn how to control microbial growth by sterilisation, disinfection and using antimicrobials. In practical classes you will learn how to stain and visualise micro-organisms using light microscopy and electron microscopy. You will isolate and culture micro-organisms and learn how to control microbial growth. You will practise identifying micro-organisms by their appearance, biochemical testing or by using molecular assays.

Year 3

Advanced studies will allow you to expand your knowledge and expertise in

Bachelor of Applied Science (Microbiology)

specialised areas including pathogenesis and disease where you can study bacterial, fungal and parasitic diseases. Other advanced topics include animal and plant viral diseases, food microbiology, molecular microbiology, bioremediation and electron microscopy. You will also cover environmental microbiology which includes the testing of soil, air and water.

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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. Following these introductory studies you should be in a position to confirm your choice of major area of study.

Year 2

You will be introduced to diverse micro-organisms and study how they have evolved, their structure, how they obtain nutrients and how they grow and reproduce. Importantly you will also learn how to control microbial growth by sterilisation, disinfection and using antimicrobials. In practical classes you will learn how to stain and visualise micro-organisms using light microscopy and electron microscopy. You will isolate and culture micro-organisms and learn how to control microbial growth. You will practise identifying micro-organisms by their appearance, biochemical testing or by using molecular assays.

Year 3

Advanced studies will allow you to expand your knowledge and expertise in specialised areas including pathogenesis and disease where you can study bacterial, fungal and parasitic diseases. Other advanced topics include animal and plant viral diseases, food microbiology, molecular microbiology, bioremediation and electron microscopy. You will also cover environmental microbiology which includes the testing of soil, air and water.

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Sample Structure Semesters

- [Year 1, Semester 1](#)
- [Year 1, Semester 2 \(Life Sciences Pre-Major Strand\)](#)

- [Year 2, Semester 1](#)
- [Year 2, Semester 2 *](#)
- [Year 3, Semester 1 *](#)
- [Year 3, Semester 2 *](#)
- [Recommended Second Majors:](#)
- [* Elective Unit for all Majors except Forensic Science:](#)

Code	Title
Year 1, Semester 1	
SCB110	Science Concepts and Global Systems
OR (after 2012)	
SC01 Selective*	
[*See "Science Selective Units" options on e-Student or refer to list at the bottom of the page]	
SCB111	Chemistry 1
OR (after Semester 1 2013)	
CVB101	General Chemistry
[Please note CVB101 is only offered in semester 2.]	
Cellular Basis of Life	
OR (after 2012)	
LQB182	Human Cell & Molecular Biology
Plus ONE of:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
1. Students without a Sound Achievement (4 semesters) in Maths A should enrol in MAB105.	
2. Students with a Sound Achievement in Maths B and NOT wishing to major in Physics should enrol in MAB101.	
3. Students with a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB121.	
4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB120.	
5. Students without a Sound Achievement in Maths B or Maths A should consult with the course coordinator.	
Year 1, Semester 2 (Life Sciences Pre-Major Strand)	
SCB120	Plant and Animal Physiology
[Note: students taking forensic science or chemistry second majors should replace SCB120 Plant and Animal Physiology with SCB131 Experimental Chemistry].	
OR (after 2012)	
LSB258	Principles of Human Physiology
OR	
LSB142	Human Anatomy and Physiology
[Please note LSB142 is only offered in semester 1.]	
SCB121	Chemistry 2
OR (after Semester 1 2013)	
CVB102	Chemical Structure and Reactivity
Cell and Molecular Biology	
OR (after 2012)	
LQB281	Human Health & Disease Concepts
[Students who have already completed SCB112, must do LQB182 instead of LQB281.]	

SCB123	Physical Science Applications
OR (after 2012)	
PCB150	Biomedical Physics
Year 2, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB386	Microbial Structure and Function
Plus TWO other units selected according to the second major requirements	
Year 2, Semester 2 *	
LQB483	Molecular Biology Techniques
LQB486	Clinical Microbiology 1
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 1 *	
LQB586	Clinical Microbiology 2
LQB587	Applied Microbiology 1: Water, Air and Soil
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 2 *	
LQB686	Microbial Technology and Immunology
LQB687	Applied Microbiology 2: Food and Quality Assurance
Plus TWO other units selected according to the second major requirements	
Recommended Second Majors:	
Biochemistry, Biotechnology, Forensic Science, Life Science Technologies	
* Elective Unit for all Majors except Forensic Science:	
SCB500	Industry Project
SCB500 Industry Project is a unit that will be offered as an elective in all majors. This unit requires 84 credit points of Level 2 and/or 3 Science units, so it may only be taken at the completion of Year 2 in Summer or during Year 3.	

Handbook

Year	2013
QUT code	SC01
CRICOS	003502J
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July 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	February, July 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
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

- Maths B
- 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 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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [ST01 Bachelor of Science](#). 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 problem-solving 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.

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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.

Sample Structure Semesters

- [Year 1, Semester 1](#)
- [Year 1, Semester 2 \(Physics Pre-Major Strand\)](#)
- [Year 2, Semester 1](#)
- [Year 2, Semester 2 *](#)
- [Year 3, Semester 1 *](#)
- [Year 3, Semester 2 *](#)
- [Recommended Second Majors:](#)
- [* Elective Unit for all Majors except Forensic Science:](#)

Code	Title
Year 1, Semester 1	
SCB110	Science Concepts and Global Systems
OR (after 2012)	
SC01 Selective*	
[*See "Science Selective Units" options on e-Student or refer to list at the bottom of the page]	
SCB111	Chemistry 1

OR (after Semester 1 2013)	
CVB101	General Chemistry
[Please note CVB101 is only offered in semester 2.]	
Cellular Basis of Life	
OR (after 2012)	
LQB182	Human Cell & Molecular Biology
OR	
BVB101	Foundations of Biology
[BVB101 is highly recommended for Ecology major and Environmental Science major students. Please note: BVB101 is only offered in Semester 2.]	
Plus ONE of:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
1. Students with a Sound Achievement (4 semesters) in Maths A should enrol in MAB105	
2. Students with a Sound Achievement in Maths B and NOT wishing to major in Physics should enrol in MAB101.	
3. Students with a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB121.	
4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB120.	
5. Students without a Sound Achievement in Maths B or Maths A should consult with the course coordinator.	
Year 1, Semester 2 (Physics Pre-Major Strand)	
MAB122	Linear Algebra and Multivariable Calculus
PQB250	Mechanics and Electromagnetism
OR (after 2012)	
PVB101	Physics of the Very Large
PQB251	Waves and Optics
OR (after 2012)	
PVB102	Physics of the Very Small
Plus either:	
MAB121	Single Variable Calculus and Differential Equations
Or	
MAB220	Computational Mathematics 1
Year 2, Semester 1	
MAB311	Advanced Calculus
PQB350	Thermodynamics of Solids and Gases
Plus TWO other unit selected according to the second major requirements	
Year 2, Semester 2 *	
PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation
Plus TWO other units selected according to the second major requirements	
Year 3, Semester 1 *	
PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques
Plus TWO other units selected according to the second major requirements	

Year 3, Semester 2 *	
PQB650	Advanced Theoretical Physics
PQB651	Experimental Physics
Plus TWO other units selected according to the second major requirements	
Recommended Second Majors:	
Astrophysics, Mathematics	
* Elective Unit for all Majors except Forensic Science:	
SCB500	Industry Project
SCB500 Industry Project is a unit that will be offered as an elective in all majors. This unit requires 84 credit points of Level 2 and/or 3 Science units, so it may only be taken at the completion of Year 2 in Summer or during Year 3.	

Handbook

Year	2013
QUT code	SC01 + SC60
Duration (full-time)	3 years
OP	2
Rank	98
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	384 [BAppSc 288 cp and BAppSc(Hons) 96 cp]
Start months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Int. Start Months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Course Coordinator	Mr Richard Thomas
Discipline Coordinator	Associate Professor John Aaskov (Microbiology, Biochemistry, Biotechnology Majors); Dr Madeleine Schultz (Chemistry Major); Dr Konstantin Momot (Physics major)

Domestic Entry requirements Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional Entry Requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available August) by the closing date.

Please Note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Domestic Assumed knowledge

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

- Physics
- Maths C
- Maths B
- English
- Chemistry

English (4, SA) and Maths B (4, VHA) plus two (2) of Biological Science, Chemistry, Earth Science, Maths C or Physics (4, VHA). We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12).

International Entry requirements Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional Entry Requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available August) by the closing date.

Please Note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

International Subject prerequisites

- Physics
- Maths C
- Maths B
- English
- Chemistry

English (4, SA) and Maths B (4, VHA) plus two (2) of Biological Science, Chemistry, Earth Science, Maths C or Physics (4, VHA). 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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course update

From Semester One 2013 this course will not be available for commencing students. SC01 will only be available for continuing students. New students - please refer to ST01. Please contact sef.enquiry@qut.edu.au for any enquiries.

Overview

The Bachelor of Applied Science Dean's Scholars Accelerated Honours Program is an accelerated program designed specifically for outstanding current, or returning from a gap year, Year 12 students who completed their Year 12 education in Australia. It also offers an accelerated pathway that enables students to complete both the Bachelor of Applied Science and the Bachelor of

Applied Science (Honours) courses in just three years. A scholarship is offered to students in the Bachelor of Applied Science Dean's Scholars Accelerated Honours Program. Students are accepted into the program on the basis of outstanding academic ability and an interest in scientific research.

Professional Recognition

As a graduate of the Bachelor of Applied Science Dean's Scholars Accelerated Honours Program you will qualify for professional recognition and employment in fields relevant to the specialisations that you have chosen. It is expected that many Dean's Scholars will proceed to Doctor of Philosophy studies.

Financial support

Domestic students offered a place in the Dean's Scholars Program will have their undergraduate HECS paid by the Faculty and those proceeding to Honours will also receive full HECS support.

International students will have one-third of their tuition fees paid by the faculty for the undergraduate and honours programs.

Course Structure

As a student in the Dean's Scholars Accelerated Honours Program you will choose one of the following nine majors. You will also choose a co-major to accompany your major area of study. The co-major may be one of the other majors, or it could be one of the co-majors listed below:

Majors: Biochemistry, Biotechnology, Chemistry, Ecology, Environmental Science, Forensic Science, Geoscience, Microbiology, Physics.

Co-majors: Applied Geology, Astrophysics, Biodiversity, Chemistry for Industry, Life Science Technologies.

To allow the Dean's Scholars Program to be completed in an accelerated format some changes are made to the first year of the standard Bachelor of Applied Science (SC01) degree. The core units normally studied in first year are replaced by an enriched course of study which includes the following units:

SCB301 Science for Dean's Scholars

An intensive preparatory program immediately preceding the commencement of the first semester. This preparatory program commences mid-January and requires attendance for approximately 18 hours per week for six weeks.

SCB303 Tutorial Program for Dean's Scholars

An individually-tailored tutorial program during the first semester, under the guidance of an academic mentor. This unit is designed in a consultative process involving the student, the academic mentor, and the Dean.

SCB401 Research Methods for Dean's Scholars

The unit allows research skills to be developed through a literature review, experimental design considerations, research proposal formulation and writing, and the presentation of a research proposal.

SCB501 Research Project for Dean's Scholars

An individually tailored research project is carried out under the supervision of a research mentor.

Honours Program

Following the successful completion of the coursework and your initial research project in the first two years of the program, you will then commence the Bachelor of Applied Science (Honours) course. The Honours program continues the study of your chosen scientific major and also provides the opportunity to undertake a large research project. The Honours degree provides an excellent preparation to continue onto postgraduate research.

Note:

The Faculty may wish to make your project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

Further Information

For further information about this course, please contact the following:

Course Coordinator

Mr Richard Thomas
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Discipline Coordinators

Microbiology, Biochemistry, Biotechnology Majors:
Associate Professor John Aaskov
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Chemistry Major:
Dr Madeleine Schultz
Phone: +61 7 3138 8822

Email: sef.enquiry@qut.edu.au

Physics Major:

Dr Konstantin Momot
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Domestic Course structure Course Structure

As a student in the Dean's Scholars Accelerated Honours Program you will choose one of the following nine majors. You will also choose a co-major to accompany your major area of study. The co-major may be one of the other majors, or it could be one of the co-majors listed below:

Majors: Biochemistry, Biotechnology, Chemistry, Ecology, Environmental Science, Forensic Science, Geoscience, Microbiology, Physics.

Co-majors: Applied Geology, Astrophysics, Biodiversity, Chemistry for Industry, Life Science Technologies.

To allow the Dean's Scholars Program to be completed in an accelerated format some changes are made to the first year of the standard Bachelor of Applied Science (SC01) degree. The core units normally studied in first year are replaced by an enriched course of study which includes the following units:

SCB301 Science for Dean's Scholars

An intensive preparatory program immediately preceding the commencement of the first semester. This preparatory program commences mid-January and requires attendance for approximately 18 hours per week for six weeks.

SCB303 Tutorial Program for Dean's Scholars

An individually-tailored tutorial program during the first semester, under the guidance of an academic mentor. This unit is designed in a consultative process involving the student, the academic mentor, and the Dean.

SCB401 Research Methods for Dean's Scholars

The unit allows research skills to be developed through a literature review, experimental design considerations, research proposal formulation and writing, and the presentation of a research proposal.

SCB501 Research Project for Dean's Scholars

An individually tailored research project is carried out under the supervision of a research mentor.

Honours Program

Following the successful completion of the coursework and your initial research project in the first two years of the program, you will then commence the Bachelor of Applied Science (Honours) course. The Honours program continues the study of your chosen scientific major and also provides the opportunity to undertake a large research project. The Honours degree provides an excellent preparation to continue onto postgraduate research.

Note

The Faculty may wish to make your project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

International Course structure

Course Structure

As a student in the Dean's Scholars Accelerated Honours Program you will choose one of the following nine majors. You will also choose a co-major to accompany your major area of study. The co-major may be one of the other majors, or it could be one of the co-majors listed below:

Majors: Biochemistry, Biotechnology, Chemistry, Ecology, Environmental Science, Forensic Science, Geoscience, Microbiology, Physics.

Co-majors: Applied Geology, Astrophysics, Biodiversity, Chemistry for Industry, Life Science Technologies.

To allow the Dean's Scholars Program to be completed in an accelerated format some changes are made to the first year of the standard Bachelor of Applied Science (SC01) degree. The core units normally studied in first year are replaced by an enriched course of study which includes the following units:

SCB301 Science for Dean's Scholars

An intensive preparatory program immediately preceding the commencement of the first semester. This preparatory program commences mid-January and requires attendance for

approximately 18 hours per week for six weeks.

SCB303 Tutorial Program for Dean's Scholars

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Honours Program

Following the successful completion of the coursework and your initial research project in the first two years of the program, you will then commence the Bachelor of Applied Science (Honours) course. The Honours program continues the study of your chosen scientific major and also provides the opportunity to undertake a large research project. The Honours degree provides an excellent preparation to continue onto postgraduate research.

Note

The Faculty may wish to make your project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

Handbook

Year	2013
QUT code	ST01
CRICOS	077696D
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
OP	13
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	Refer to majors
International fee (indicative)	2013: \$14,000 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July Only the first year of the degree will be available in 2013. Subsequent years will be progressively introduced, subject to approval. If you are offered a second or third year place you will be admitted to SC01 Bachelor of Applied Science.
Int. Start Months	February, July Students with advanced standing may be offered a place in the SC01 Bachelor of Applied Science.
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr Ian Williamson

Domestic Assumed knowledge

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

- Maths B
- English

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 or Maths C.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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:

Innovation and Entrepreneurship, Policy & Governance, Sustainable Environments for Health, Computational Science, Science Communication.

Minors and Extension Minors

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: aviation, corporate IT systems, environmental engineering studies, ethics and human rights, foreign languages, games technology, geography, journalism, management, marketing, music, nutrition, psychology, forensic science.

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 enrolls in an average of 48 credit points per semester for six semesters and a part-time student normally enrolls 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.

Bachelor of Science

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).

ST01 Second Majors and Minors

For a unit list of ST01 Second Major and Minors please click [here](#) to view your 2nd major and minor options or go to ST01 Bachelor of Science course page and click on Course Checklists link.

Further Information

Course Coordinator

Dr Ian Williamson

Phone: +61 7 3138 2779

Email: i.williamson@qut.edu.au

Alternative phone contact: +61 7 3138 8822

Alternative email contact:

sef.enquiry@qut.edu.au

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 and Imagine Science units

These six 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 two Faculty core units, two Imagine Science units and two Optional units of your choice.

From your very first semester, you will collaborate with your peers and teaching staff in QUT's exciting new learning environments. In your Imagine Science units 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 10 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

- computer science
- innovation
- education (STEM disciplines)
- science communication, or
- science policy.

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:

Extension minor (four units)

Gain further insights and depth in your primary area of study. Intensify your chosen major to develop additional knowledge, skills and experience for your career in science.

Breadth minor (four units)

Broaden your studies to include minors from the list of science majors, second majors or from the list of University-wide 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, Semester 1	
SEB101	Science in Context
SEB102	Understanding Science
SEB113	Quantitative Methods in Science
SEB114	Experimental Science
Year 1, Semester 2	
Major Unit	
Major Unit	
Core Unit Option	
Core Unit Option	
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	
2nd major or minor unit	
Year 2, Semester 1	
Major Unit	
Major Unit	

Bachelor of Science

2nd major or minor unit

2nd major or minor unit

Year 2, Semester 2

Major Unit

Major Unit

2nd major or minor unit

2nd major or minor unit

Handbook

Year	2013
QUT code	ST01
CRICOS	077696D
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
OP	13
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester
International fee (indicative)	2013: \$14,000 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July Only the first year of the degree will be available in 2013. Subsequent years will be progressively introduced, subject to approval. If you are offered a second or third year place you will be admitted to SC01 Bachelor of Applied Science.
Int. Start Months	February, July Students with advanced standing may be offered a place in the SC01 Bachelor of Applied Science.
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr Ian Williamson
Discipline Coordinator	Dr Doug Becker

Domestic Assumed knowledge

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

- Maths B
- English

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: Biology and Chemistry.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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.

ST01 Second Majors and Minors

For a unit list of ST01 Second Major and Minors please click [here](#) to view your 2nd major and minor options or go to ST01 Bachelor of Science course page and click on Course Checklists link.

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 and Imagine Science units

These six 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 two Faculty core units, two Imagine Science units and two Optional units of your choice.

From your very first semester, you will collaborate with your peers and teaching staff in QUT's exciting new learning environments. In your Imagine Science units 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 10 units and there are five majors to choose from:

- Biological Sciences
- Chemistry
- Earth Science
- Environmental Science
- 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
- computer science
- innovation
- education (STEM disciplines)
- science communication, or
- science policy.

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:

Extension minor (four units)

Gain further insights and depth in your primary area of study. Intensify your chosen major to develop additional knowledge, skills and experience for your career in science.

Breadth minor (four units)

Broaden your studies to include minors from the list of science majors, second majors or from the list of University-wide 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](#)

Code	Title
Year 1, Semester 1	
SEB101	Science in Context
SEB102	Understanding Science
SEB113	Quantitative Methods in Science
SEB114	Experimental Science
Year 1, Semester 2	
BVB101	Foundations of Biology
BVB102	Evolution
Core Unit Option	
Core Unit Option	
Year 2, Semester 1	
BVB201	Biological Processes
Experimental Biology	
2nd major or minor unit	
2nd major or minor unit	
Year 2, Semester 2	
Plant Biology	
Ecology	
2nd major or minor unit	
2nd major or minor unit	
Year 3, Semester 1	
Animal Biology	
Applied Biology	
2nd major or minor unit	
2nd major or minor unit	
Year 3, Semester 2	
Advanced Studies in Biology	
Integrative Biology	
2nd major or minor unit	
2nd major or minor unit	

Handbook

Year	2013
QUT code	ST01
CRICOS	077696D
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
OP	13
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester
International fee (indicative)	2013: \$14,000 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July Only the first year of the degree will be available in 2013. Subsequent years will be progressively introduced, subject to approval. If you are offered a second or third year place you will be admitted to SC01 Bachelor of Applied Science.
Int. Start Months	February, July Students with advanced standing may be offered a place in the SC01 Bachelor of Applied Science.
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr Ian Williamson
Discipline Coordinator	Associate Professor Eric Wacławik

Domestic Assumed knowledge

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

- Maths B
- English

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: Biology and Chemistry.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 of the Royal Australian Chemical Institute.

ST01 Second Majors and Minors

For a unit list of ST01 Second Major and Minors please click [here](#) to view your 2nd major and minor options or go to ST01 Bachelor of Science course page and click on Course Checklists link.

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 and Imagine Science units

These six 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 two Faculty core units, two Imagine Science units and two Optional units of your choice.

From your very first semester, you will collaborate with your peers and teaching staff in QUT's exciting new learning environments. In your Imagine Science units 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 10 units and there are five majors to choose from:

- Biological Sciences
- Chemistry
- Earth Science
- Environmental Science

- 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
- computer science
- innovation
- education (STEM disciplines)
- science communication, or
- science policy.

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:

Extension minor (four units)

Gain further insights and depth in your primary area of study. Intensify your chosen major to develop additional knowledge, skills and experience for your career in science.

Breadth minor (four units)

Broaden your studies to include minors from the list of science majors, second majors or from the list of University-wide 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](#)

Code	Title
Year 1, Semester 1	
SEB101	Science in Context
SEB102	Understanding Science
SEB113	Quantitative Methods in Science
SEB114	Experimental Science
Year 1, Semester 2	
CVB101	General Chemistry
CVB102	Chemical Structure and Reactivity
Core Unit Option	
Core Unit Option	
Year 2, Semester 1	
Inorganic Chemistry	
Analytical Chemistry	
2nd major or minor unit	
2nd major or minor unit	
Year 2, Semester 2	
Physical Chemistry	
Organic Structure and Mechanisms	
2nd major or minor unit	
2nd major or minor unit	
Year 3, Semester 1	
Organic Chemistry: Strategies for Synthesis	
Applied Physical Chemistry	
2nd major or minor unit	
2nd major or minor unit	
Year 3, Semester 2	
Coordination Chemistry	
Chemical Research	
2nd major or minor unit	
2nd major or minor unit	

Handbook

Year	2013
QUT code	ST01
CRICOS	077696D
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
OP	13
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester
International fee (indicative)	2013: \$14,000 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July Only the first year of the degree will be available in 2013. Subsequent years will be progressively introduced, subject to approval. If you are offered a second or third year place you will be admitted to SC01 Bachelor of Applied Science.
Int. Start Months	February, July Students with advanced standing may be offered a place in the SC01 Bachelor of Applied Science.
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr Ian Williamson
Discipline Coordinator	Dr Jessica Trofimovs

Domestic Assumed knowledge

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

- Maths B
- English

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 or Maths C.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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.

ST01 Second Majors and Minors

For a unit list of ST01 Second Major and Minors please click [here](#) to view your 2nd major and minor options or go to ST01 Bachelor of Science course page and click on Course Checklists link.

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 and Imagine Science units

These six units give you an introduction to the principles of science the opportunity to learn by enquiry, and to broaden your

Bachelor of Science (Earth Science)

understanding of the core sciences. You'll study two Faculty core units, two Imagine Science units and two Optional units of your choice.

From your very first semester, you will collaborate with your peers and teaching staff in QUT's exciting new learning environments. In your Imagine Science units 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 10 units and there are five majors to choose from:

- Biological Sciences
- Chemistry
- Earth Science
- Environmental Science
- 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
- computer science
- innovation
- education (STEM disciplines)
- science communication, or
- science policy.

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:

Extension minor (four units)

Gain further insights and depth in your primary area of study. Intensify your chosen major to develop additional knowledge, skills and experience for your career in science.

Breadth minor (four units)

Broaden your studies to include minors from the list of science majors, second majors or from the list of University-wide 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](#)

Code	Title
Year 1, Semester 1	
SEB101	Science in Context
SEB102	Understanding Science
SEB113	Quantitative Methods in Science
SEB114	Experimental Science
Year 1, Semester 2	
ERB101	Earth Systems
ERB102	Evolving Earth
Core Unit Option	
Core Unit Option	

Year 2, Semester 1	
Destructive Earth	
Molten Earth	
2nd major or minor unit	
2nd major or minor unit	
Year 2, Semester 2	
Sedimentary Geology and Stratigraphy	
Deforming Earth	
2nd major or minor unit	
2nd major or minor unit	
Year 3, Semester 1	
Marine Geosciences	
Groundwater Systems	
2nd major or minor unit	
2nd major or minor unit	
Year 3, Semester 2	
Research Practice in Earth Sciences	
Geodynamic Earth	
2nd major or minor unit	
2nd major or minor unit	

Handbook

Year	2013
QUT code	ST01
CRICOS	077696D
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
OP	13
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester
International fee (indicative)	2013: \$14,000 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July Only the first year of the degree will be available in 2013. Subsequent years will be progressively introduced, subject to approval. If you are offered a second or third year place you will be admitted to SC01 Bachelor of Applied Science.
Int. Start Months	February, July Students with advanced standing may be offered a place in the SC01 Bachelor of Applied Science.
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr Ian Williamson
Discipline Coordinator	Dr Andrew Baker

Domestic Assumed knowledge

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

- Maths B
- English

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 or Maths C.

International Subject prerequisites

- Maths B
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why choose this course?

The environmental science course at QUT is designed to provide hands-on skills and field experiences using real-world 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.

ST01 Second Majors and Minors

For a unit list of ST01 Second Major and Minors please click [here](#) to view your 2nd major and minor options or go to ST01 Bachelor of Science course page and click on Course Checklists link.

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 and Imagine Science units

These six 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 two Faculty core units, two Imagine Science units and two Optional units of your choice.

From your very first semester, you will collaborate with your peers and teaching staff in QUT's exciting new learning environments. In your Imagine Science units 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 10 units and there are five majors to choose from:

- Biological Sciences
- Chemistry
- Earth Science
- Environmental Science

- 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
- computer science
- innovation
- education (STEM disciplines)
- science communication, or
- science policy.

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:

Extension minor (four units)

Gain further insights and depth in your primary area of study. Intensify your chosen major to develop additional knowledge, skills and experience for your career in science.

Breadth minor (four units)

Broaden your studies to include minors from the list of science majors, second majors or from the list of University-wide 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](#)

Code	Title
Year 1, Semester 1	
SEB101	Science in Context
SEB102	Understanding Science
SEB113	Quantitative Methods in Science
SEB114	Experimental Science
Year 1, Semester 2	
ERB101	Earth Systems
EVB102	Ecosystems and the Environment
Core Unit Option	
Core Unit Option	
Year 2, Semester 1	
Global Environmental Issues	
Quantitative Skills for Environmental Science	
2nd major or minor unit	
2nd major or minor unit	
Year 2, Semester 2	
Geospatial Information Science	
Land Resource Management	
2nd major or minor unit	
2nd major or minor unit	
Year 3, Semester 1	
Urban and Natural Environmental Systems	
Environmental Pollution	
2nd major or minor unit	
2nd major or minor unit	
Year 3, Semester 2	
ENB380	Environmental Law and Assessment
Research Practice in Environmental Science	
2nd major or minor unit	
2nd major or minor unit	

Handbook

Year	2013
QUT code	ST01
CRICOS	077696D
Duration (full-time)	3 years
Duration (part-time domestic)	6 years
OP	13
Rank	72
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 credit points)
International fee (indicative)	2013: \$14,000 per Semester
Total credit points	288
Credit points full-time sem.	48
Credit points part-time sem.	24
Start months	February, July Only the first year of the degree will be available in 2013. Subsequent years will be progressively introduced, subject to approval. If you are offered a second or third year place you will be admitted to SC01 Bachelor of Applied Science.
Int. Start Months	February, July Students with advanced standing may be offered a place in the SC01 Bachelor of Applied Science.
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Dr Ian Williamson
Discipline Coordinator	Dr Jamie Trapp

Domestic Assumed knowledge

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

- Maths B
- English

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 or Maths C.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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.

ST01 Second Majors and Minors

For a unit list of ST01 Second Major and Minors please click [here](#) to view your 2nd major and minor options or go to ST01 Bachelor of Science course page and click on Course Checklists link.

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 and Imagine Science units

These six 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 two Faculty core units, two Imagine Science units and two Optional units of your choice.

From your very first semester, you will collaborate with your peers and teaching staff in QUT's exciting new learning environments. In your Imagine Science units 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 10 units and there are five majors to choose from:

- Biological Sciences
- Chemistry
- Earth Science
- Environmental Science
- 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
- computer science
- innovation
- education (STEM disciplines)
- science communication, or
- science policy.

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:

Extension minor (four units)

Gain further insights and depth in your primary area of study. Intensify your chosen major to develop additional knowledge, skills and experience for your career in science.

Breadth minor (four units)

Broaden your studies to include minors from the list of science majors, second majors or from the list of University-wide 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](#)

Code	Title
Year 1, Semester 1	
SEB101	Science in Context
SEB102	Understanding Science
SEB113	Quantitative Methods in Science
SEB114	Experimental Science
Year 1, Semester 2	
PVB101	Physics of the Very Large
PVB102	Physics of the Very Small
Core Unit Option	
Core Unit Option	
Year 2, Semester 1	
Instrumentation	
Mathematical Methods in Physics	
2nd major or minor unit	
2nd major or minor unit	
Year 2, Semester 2	
Experimental Physics	
Electromagnetism	
2nd major or minor unit	
2nd major or minor unit	
Year 3, Semester 1	
Materials and Thermal Physics	
Classical and Quantum Physics	
2nd major or minor unit	
2nd major or minor unit	
Year 3, Semester 2	
Nuclear and Particle Physics	
Physics Research	
2nd major or minor unit	
2nd major or minor unit	

Handbook

Year	2013
QUT code	ST01
Duration (full-time)	3 years
OP	1
Rank	99
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester
International fee (indicative)	2013: \$14,000 per Semester
Start months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012.
Int. Start Months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012.
Discipline Coordinator	

Domestic Entry requirements 2013 questionnaires have closed

Questionnaires for the 2013 intake were due to completed on the 16 November 2012 and are now closed. If you had not submitted the questionnaire and you are considering applying to study in 2014 we recommend you read the following information as a guide only as it details requirements for entry in 2013 and these may change prior to the 2014 intake. You may also wish to consider applying for the standard entry program for 2013 entry.

Prerequisites

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Additional entry requirements

In addition to applying through QTAC and you must also submit the [online Science and Engineering Dean's Scholars questionnaire](#) by the closing date.

Please note submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Closing date

Submit the online questionnaire with QUT by Friday, 16 November 2012.

Domestic Assumed knowledge

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

- Maths B
- English

We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12) with sound achievement (4, SA) in English and very high achievement (4,VHA) in Maths B and two of Biology, Chemistry, Earth Science, Maths C or Physics.

International Subject prerequisites

- Maths B
- English

You have achieved the equivalent of four semesters at high school level (Years 11 and 12) with sound achievement (4, SA)

in English and very high achievement (4,VHA) in Maths B and two of Biology, Chemistry, Earth Science, Maths C or Physics.

Minimum english requirements

Students must meet the English proficiency requirements.

Please Note

As of 2013, all new Dean's Scholar applicants will be admitted into the standard Bachelor programs, with no accelerated studies and no pre-approved articulation to Honours degrees.

Eligibility Criteria

Applicants must:

- have completed Year 12 in the year they apply for the program, or the previous year
- have received an OP 1 (or equivalent)
- be starting university for the first time
- demonstrate leadership experience and potential
- demonstrate community participation and engagement
- apply for and gain a place in the relevant Dean's Scholars Program

If studying at QUT International College (QUTIC), applicant must have a grade point average (GPA) of at least 6.5 for the two semesters immediately before they apply for the Dean's Scholars Program.

If expecting to get an OP of 1-3, applicant should apply for consideration.

Financial Support

Successful applicants will receive:

- A scholarship of up to \$6,000 per annum, usually payable in 2 instalments of \$3,000 by the 2nd week of semester 1 and semester 2 of each year. The scholarship would apply for the full-time duration of the undergraduate degree, contingent upon students meeting the conditions of the program (refer to Conditions below). The total value of the scholarship is limited to \$18,000 for the 3 year programs and \$24,000 for the 4 year programs.

Conditions

To keep a place in the Dean's Scholars program, students must:

- maintain enrolment full-time in the eligible undergraduate course
- graduate from the Bachelor of Science within 3 years of starting, except where

Bachelor of Science - Dean's Scholars Program

you've taken a leave of absence approved by the Assistant Dean, or there are other extenuating circumstances

- maintain a grade point average (GPA) of at least 6.0 each semester
- meet the requirements of program completion (for example work experience and work integrated learning)
- pay any costs associated with their program that aren't covered by the scholarship, including additional and repeated units
- demonstrate adequate participation in extracurricular elements of the program.

Students can:

- apply to change their course structure under exceptional circumstances. Students must apply through their academic mentor or course coordinator, and receive prior written approval from the Assistance Dean International and Engagement.
- apply [for other scholarships and bursaries](#), including ones associated with travel, as long as they are allowed to under the conditions of the other scholarship and under our [Industry sponsored student scholarships policy](#).

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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	
SEB101	Science in Context
SEB102	Understanding Science
SEB113	Quantitative Methods in Science
SEB114	Experimental Science
Year 1, Semester 2	
BVB101	Foundations of Biology
BVB102	Evolution
Core Unit Option	
Core Unit Option	
Year 2, Semester 1	
BVB201	Biological Processes
Experimental Biology	
2nd major or minor unit	
2nd major or minor unit	
Year 2, Semester 2	
Plant Biology	

Ecology
2nd major or minor unit
2nd major or minor unit
Year 3, Semester 1
Animal Biology
Applied Biology
2nd major or minor unit
2nd major or minor unit
Year 3, Semester 2
Advanced Studies in Biology
Integrative Biology
2nd major or minor unit
2nd major or minor unit

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Associate Professor Chris Collet

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Discontinuation

As of 2013, ST50 will only be available for continuing students. No further intakes will be accepted.

Please contact sef.enquiry@qut.edu.au for any enquiries.

Professional Recognition

On graduation, you will be eligible to join professional organisations relevant to your disciplinary specialisation, the Association of Professional Engineers, Scientists and Managers, Australia and the Australian Institute of Management.

Your Course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Further Information

For further information about this course, please contact:

Course Coordinator

Associate Professor Chris Collet

Phone: +61 7 3138 5173

Email: c.collet@qut.edu.au

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	384
Credit points full-time sem.	48
Dom. Start Months	February
Course Coordinator	Associate Professor Chris Collet
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why Choose This Course

If you like to work in a dynamic world of translating discovery and creativity into commercial products, meeting people, and working in a high-powered team environment to build money-making enterprises, then this course is for you. The Bachelor of Technology Innovation will allow a rapid entry into the high-flying world of commercialisation and technology transfer. This new degree builds upon the successful Bachelor of Biotechnology Innovation which has seen graduates realise outstanding job outcomes, often successfully competing against graduates with PhDs and MBAs.

Professional Recognition

Graduates are eligible for membership of the Australian Society for Biochemistry and Molecular Biology (ASBMB), and in some cases the Australasian Association of Clinical Biochemists (AACB).

Your Course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Domestic Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Bachelor of Technology Innovation (Biochemistry)

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

International Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

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You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

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](#)
- [* Recommended Year 2 Semester 1 Units](#)
- [# Recommended Year 2 Semester 2 Units](#)

Code	Title
Year 1, Semester 1	
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
Cellular Basis of Life	
Plus ONE of the following units:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
1. Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105.	
2. Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101.	
3. Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB121.	

4. Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB120.

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
Cell and Molecular Biology	
SCB123	Physical Science Applications

Year 2, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
Plus TWO units from the relevant options List which may include one unit from outside of the Faculty *	

Year 2, Semester 2

LQB481	Biochemical Pathways and Metabolism
LQB483	Molecular Biology Techniques
Plus TWO units from the relevant options List which may include one unit from outside of the Faculty#	

Year 3, Semester 1

BSB115	Management
LQB581	Functional Biochemistry
LQB582	Biomedical Research Technologies
STB551	Engaging with the Innovation Industry

Year 3, Semester 2

BSB126	Marketing
LQB681	Biochemical Research Skills
LQB682	Protein Biochemistry and Bioengineering
MGB223	Entrepreneurship and Innovation

Year 4, Semester 1

AMB240	Marketing Planning and Management
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
STB709-1	Innovation and Commercialisation Project

Year 4, Semester 2

BSB311	Innovation Commercialisation Strategies
MGB225	Intercultural Communication and Negotiation Skills
STB709-2	Innovation and Commercialisation Project
STB709-3	Innovation and Commercialisation Project

* Recommended Year 2 Semester 1 Units

LQB386	Microbial Structure and Function
LQB388	Medical Physiology 1

Recommended Year 2 Semester 2 Units

Any TWO units listed below provided prerequisites are met:

LQB484	Introduction to Genomics and Bioinformatics
LQB486	Clinical Microbiology 1
LQB488	Medical Physiology 2
LQB489	Plant Physiology and Cell Biology

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Associate Professor Chris Collet
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why Choose This Course

If you like to work in a dynamic world of translating discovery and creativity into commercial products, meeting people, and working in a high-powered team environment to build money-making enterprises, then this course is for you. The Bachelor of Technology Innovation will allow a rapid entry into the high-flying world of commercialisation and technology transfer. This new degree builds upon the successful Bachelor of Biotechnology Innovation which has seen graduates realise outstanding job outcomes, often successfully competing against graduates with PhDs and MBAs.

Professional Recognition

On graduation, you will be eligible to join professional organisations relevant to your disciplinary specialisation, the Association of Professional Engineers, Scientists and Managers, Australia and the Australian Institute of Management.

Your Course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Domestic Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Bachelor of Technology Innovation (Biomedical Science)

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

International Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

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You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

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	
MAB141	Mathematics and Statistics for Medical Science
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
Cellular Basis of Life	
Year 1, Semester 2	
LSB255	Human Anatomy
PCB150	Biomedical Physics
SCB121	Chemistry 2
Cell and Molecular Biology	
Year 2, Semester 1	
LQB383	Molecular and Cellular Regulation
LQB386	Microbial Structure and Function
LQB388	Medical Physiology 1
LSB325	Biochemistry
Year 2, Semester 2	
LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics
LQB486	Clinical Microbiology 1
LSB425	Quantitative Medical Science

Year 3, Semester 1

BSB115	Management
STB551	Engaging with the Innovation Industry
Plus any TWO of the following five units	
LQB583	Genetic Research Technology
LQB584	Medical Cell Biology
LQB586	Clinical Microbiology 2
LSB525	Chemical Pathology

Elective

Year 3, Semester 2

BSB126	Marketing
MGB223	Entrepreneurship and Innovation
Plus any TWO units of the following five units provided the prerequisites are met:	
LQB488	Medical Physiology 2
LQB684	Medical Biotechnology
LSB625	Diagnostic Endocrinology
LSB658	Clinical Physiology

Elective

Year 4, Semester 1

AMB240	Marketing Planning and Management
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
STB709-1	Innovation and Commercialisation Project

Year 4, Semester 2

BSB311	Innovation Commercialisation Strategies
MGB225	Intercultural Communication and Negotiation Skills
STB709-2	Innovation and Commercialisation Project
STB709-3	Innovation and Commercialisation Project

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Associate Professor Chris Collet
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why Choose This Course

If you like to work in a dynamic world of translating discovery and creativity into commercial products, meeting people, and working in a high-powered team environment to build money-making enterprises, then this course is for you. The Bachelor of Technology Innovation will allow a rapid entry into the high-flying world of commercialisation and technology transfer. This new degree builds upon the successful Bachelor of Biotechnology Innovation which has seen graduates realise outstanding job outcomes, often successfully competing against graduates with PhDs and MBAs.

Professional Recognition

Graduates are eligible for membership of AusBiotech Ltd, Australian Society for Biochemistry and Molecular Biology (ASBMB) and, depending on unit selection, Australian Society for Medical Research (ASMR) and the Australian Society for Microbiology (ASM).

Your Course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Domestic Course structure

Your course

Year 1

You will be able to choose units from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Bachelor of Technology Innovation (Biotechnology)

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through an action learning framework, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy-style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real-world experience and prepare you for your future career.

International Course structure

Your course

Year 1

You will be able to choose units from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary

advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through an action learning framework, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy-style projects and extra-curricular networking events and an industry career.

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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	
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
Cellular Basis of Life	
Plus ONE of the following units	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
NOTE: Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101	
Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105	
Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB121	
Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB120	
Year 1 Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
Cell and Molecular Biology	
SCB123	Physical Science Applications

Year 2 Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
Plus TWO units from the relevant options List which may include one unit from outside the Faculty	
Relevant Options List for Year 2, Semester 1	
LQB386	Microbial Structure and Function
LQB388	Medical Physiology 1
Elective	

Year 2 Semester 2

LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics
Plus TWO units from the relevant options List which may include one unit from outside the Faculty	
Relevant Options List for Year 2, Semester 2	
LQB481	Biochemical Pathways and Metabolism
LQB486	Clinical Microbiology 1
LQB488	Medical Physiology 2
LQB489	Plant Physiology and Cell Biology
Elective	

Year 3 Semester 1

BSB115	Management
STB551	Engaging with the Innovation Industry
Plus any TWO of the three units below provided prerequisites are met	
LQB583	Genetic Research Technology
LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation

Year 3 Semester 2

BSB126	Marketing
MGB223	Entrepreneurship and Innovation
Plus any TWO of the three units below provided prerequisites are met	
LQB682	Protein Biochemistry and Bioengineering
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions

Year 4 Semester 1

AMB240	Marketing Planning and Management
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
STB709-1	Innovation and Commercialisation Project

Year 4 Semester 2

BSB311	Innovation Commercialisation Strategies
MGB225	Intercultural Communication and Negotiation Skills
STB709-2	Innovation and Commercialisation Project
STB709-3	Innovation and Commercialisation Project

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
OP Guarantee	Yes
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Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Associate Professor Chris Collet
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why Choose This Course

If you like to work in a dynamic world of translating discovery and creativity into commercial products, meeting people, and working in a high-powered team environment to build money-making enterprises, then this course is for you. The Bachelor of Technology Innovation will allow a rapid entry into the high-flying world of commercialisation and technology transfer. This new degree builds upon the successful Bachelor of Biotechnology Innovation which has seen graduates realise outstanding job outcomes, often successfully competing against graduates with PhDs and MBAs.

Professional Recognition

On graduation, you will be eligible to join professional organisations relevant to your disciplinary specialisation, the Association of Professional Engineers, Scientists and Managers, Australia and the Australian Institute of Management.

Your Course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Domestic Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Bachelor of Technology Innovation (Chemistry)

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

International Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

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	
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
Cellular Basis of Life	
Plus ONE of the following units	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
NOTE: Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101	
Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105	
Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB121	
Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB120	
Year 1 Semester 2	
SCB121	Chemistry 2

SCB123	Physical Science Applications
SCB131	Experimental Chemistry
Plus ONE of the following two units	
MAB120	Foundations of Calculus and Algebra
Cell and Molecular Biology	
Year 2 Semester 1	
PQB312	Analytical Chemistry For Scientists and Technologists
PQB331	Structure and Bonding
Plus TWO units from the relevant options List which may include one unit from outside the Faculty	
Relevant Options List for Year 2, Semester 1	
MAB120	Foundations of Calculus and Algebra
PQB313	Analytical Chemistry For Industry
Elective	
MAB120 may be taken by students who undertook SCB122 in Year 1 Semester 2	
Year 2 Semester 2	
PQB401	Reaction Kinetics, Thermodynamics and Mechanisms
PQB442	Chemical Spectroscopy
Plus TWO units from the relevant options List which may include one unit from outside the Faculty	
Relevant Options List for Year 2, Semester 2	
PQB404	Nanotechnology and Nanoscience
PQB423	Process Principles
Elective	
Year 3 Semester 1	
BSB115	Management
PQB502	Advanced Physical Chemistry
PQB531	Organic Mechanisms and Synthesis
STB551	Engaging with the Innovation Industry
Year 3 Semester 2	
BSB126	Marketing
MGB223	Entrepreneurship and Innovation
PQB631	Advanced Inorganic Chemistry
PQB642	Chemical Research
Year 4 Semester 1	
AMB240	Marketing Planning and Management
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
STB709-1	Innovation and Commercialisation Project
Year 4 Semester 2	
BSB311	Innovation Commercialisation Strategies
MGB225	Intercultural Communication and Negotiation Skills
STB709-2	Innovation and Commercialisation Project
STB709-3	Innovation and Commercialisation Project

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Associate Professor Chris Collet
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why Choose This Course

If you like to work in a dynamic world of translating discovery and creativity into commercial products, meeting people, and working in a high-powered team environment to build money-making enterprises, then this course is for you. The Bachelor of Technology Innovation will allow a rapid entry into the high-flying world of commercialisation and technology transfer. This new degree builds upon the successful Bachelor of Biotechnology Innovation which has seen graduates realise outstanding job outcomes, often successfully competing against graduates with PhDs and MBAs.

Professional Recognition

No professional accreditation is currently available for courses in the games and entertainment area.

Your Course

Year 1

You will be able to choose subjects from

across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Domestic Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the

Bachelor of Technology Innovation (Digital Media)

science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

International Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual

property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

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](#)
- [Year 4 Semester 1](#)
- [Year 4 Semester 2](#)
- [Block C Minor List](#)
- [ANIMATION:](#)
- [GAME DESIGN:](#)
- [MATHEMATICS FOR GAMES:](#)
- [MOBILE AND NETWORK TECHNOLOGIES:](#)
- [SOUND DESIGN:](#)
- [SOFTWARE TECHNOLOGIES:](#)
- [PHYSICS FOR GAMES:](#)

Code	Title
The course consists of four blocks of studies	
Core Studies - 13 units (156 credit points)	
Major - 13 units (156 credit points)	
Minor - 4 units (48 credit points)	
Electives - 2 units (24 credit points)	
Year 1 Semester 1	
INB101	Impact of IT
INB104	Building IT Systems
INB180	Computer Games Studies
INB182	Introducing Design
Year 1 Semester 2	
INB103	Industry Insights
INB181	Introduction to Games Production
Block C or Block D Unit	
Block C or Block D Unit	
Year 2 Semester 1	
INB385	Multimedia Systems
KIB101	Visual Communication
KIB204	Web Interface Design

Block C or Block D Unit	
Year 2 Semester 2	
INB386	Advanced Multimedia Systems
KIB102	Visual Interactions
Block C or Block D Unit	
Block C or Block D Unit	
Year 3 Semester 1	
BSB115	Management
INB345	Mobile and Ubiquitous Computing
KIB309	Embodied Interactions
STB551	Engaging with the Innovation Industry
Year 3 Semester 2	
BSB126	Marketing
KIB314	Tangible Media
MGB223	Entrepreneurship and Innovation
Block C or Block D Unit	
Year 4 Semester 1	
AMB240	Marketing Planning and Management
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
STB709-1	Innovation and Commercialisation Project
Year 4 Semester 2	
BSB311	Innovation Commercialisation Strategies
MGB225	Intercultural Communication and Negotiation Skills
STB709-2	Innovation and Commercialisation Project
STB709-3	Innovation and Commercialisation Project
Block C Minor List	
ANIMATION:	
KIB105	Animation and Motion Graphics
Animation History and Practices	
Introduction to 3D Computer Graphics	
Character Development, Conceptual Design and Animation Layout	
KVB105	Drawing for Design
KVB106	Drawing for Animation
GAME DESIGN:	
KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion
INB280	Fundamentals of Game Design
Plus ONE of the following two units:	
INB281	Advanced Game Design
INB272	Interaction Design
MATHEMATICS FOR GAMES:	
MAB120	Foundations of Calculus and Algebra
MAB122	Linear Algebra and Multivariable Calculus
MAB121	Single Variable Calculus and Differential Equations
MAB312	Linear Algebra
[Students who have completed Maths C can substitute MAB120 with one of the following units: MAB311, MAB481 or MAB422]	
MOBILE AND NETWORK TECHNOLOGIES:	

Bachelor of Technology Innovation (Digital Media)

INB102	Emerging Technology
INB251	Networks
INB350	Internet Protocols and Services
INB353	Wireless and Mobile Networks
SOUND DESIGN:	
KMB107	Sound, Image, Text
KMB119	Music and Sound Production 1
KMB129	Music and Sound Production 2
KMB252	Multi-Platform Sound Design
SOFTWARE TECHNOLOGIES:	
INB210	Databases
INB250	Foundations of Computer Science
INB270	Programming
INB371	Data Structures and Algorithms
PHYSICS FOR GAMES:	
MAB121	Single Variable Calculus and Differential Equations
PQB250	Mechanics and Electromagnetism
PQB251	Waves and Optics
Plus ONE of the following three units:	
PQB450	Energy, Fields and Radiation
PQB460	Astrophysics 1
PCB593	Digital Image Processing

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Associate Professor Chris Collet
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why Choose This Course

If you like to work in a dynamic world of translating discovery and creativity into commercial products, meeting people, and working in a high-powered team environment to build money-making enterprises, then this course is for you. The Bachelor of Technology Innovation will allow a rapid entry into the high-flying world of commercialisation and technology transfer. This new degree builds upon the successful Bachelor of Biotechnology Innovation which has seen graduates realise outstanding job outcomes, often successfully competing against graduates with PhDs and MBAs.

Professional Recognition

Professional recognition is achieved through membership of a scientific society, for example, the Ecological Society of Australia (ESA) or the Australian Wildlife Management Society (AWMS) and participation in its meetings and professional activities.

Your Course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Domestic Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Bachelor of Technology Innovation (Ecology)

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

International Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

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	
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
Cellular Basis of Life	
Plus ONE of the following four units:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB121	Single Variable Calculus and Differential Equations
MAB120	Foundations of Calculus and Algebra
NOTE: Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101	
Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105	
Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB121	
Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB120	
Year 1, Semester 2	
NQB201	Planet Earth

NQB202	History of Life on Earth
SCB120	Plant and Animal Physiology
Plus ONE of the following three units:	
SCB121	Chemistry 2
Cell and Molecular Biology	
SCB123	Physical Science Applications
Year 2, Semester 1	
NQB321	Ecology
Plus ONE of the following three units	
NQB302	Earth Surface Systems
NQB322	Invertebrate Biology
NQB323	Plant Biology
Plus TWO units from the relevant options List which may include one unit from outside of the Faculty	
Relevant Options List for Year 2 Semester 1	
NQB322	Invertebrate Biology
NQB323	Plant Biology
Elective	
Year 2, Semester 2	
NQB421	Experimental Design
NQB422	Genetics and Evolution
Plus TWO units from the relevant options List which may include one unit from outside of the Faculty	
Relevant Options List for Year 2 Semester 2	
NQB423	Vertebrate Biology
Elective	
Year 3, Semester 1	
BSB115	Management
NQB521	Population Genetics and Molecular Ecology
NQB523	Population Management
STB551	Engaging with the Innovation Industry
Year 3, Semester 2	
BSB126	Marketing
MGB223	Entrepreneurship and Innovation
NQB622	Conservation Biology
NQB623	Ecological Systems
Year 4, Semester 1	
AMB240	Marketing Planning and Management
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
STB709-1	Innovation and Commercialisation Project
Year 4, Semester 2	
BSB311	Innovation Commercialisation Strategies
MGB225	Intercultural Communication and Negotiation Skills
STB709-2	Innovation and Commercialisation Project
STB709-2	Innovation and Commercialisation Project

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Associate Professor Chris Collet
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why Choose This Course

If you like to work in a dynamic world of translating discovery and creativity into commercial products, meeting people, and working in a high-powered team environment to build money-making enterprises, then this course is for you. The Bachelor of Technology Innovation will allow a rapid entry into the high-flying world of commercialisation and technology transfer. This new degree builds upon the successful Bachelor of Biotechnology Innovation which has seen graduates realise outstanding job outcomes, often successfully competing against graduates with PhDs and MBAs.

Professional Recognition

Graduates are eligible for membership of the Environment Institute of Australia and New Zealand (EIANZ) and a variety of other scientific societies, including the Soil Science Society of Australia (SSSA) and the Ecological Society of Australia (ESA).

Your Course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Domestic Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Bachelor of Technology Innovation (Environmental Science)

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

International Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

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	
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
Cellular Basis of Life	
Plus ONE of the following four units:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
NOTE: Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101	
Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105	
Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB121	
Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB120	
Year 1 Semester 2	
NQB202	History of Life on Earth

SCB120	Plant and Animal Physiology
SCB123	Physical Science Applications
Plus ONE of the following two units:	
NQB201	Planet Earth
SCB121	Chemistry 2
Year 2 Semester 1	
NQB302	Earth Surface Systems
NQB321	Ecology
Plus TWO units from the relevant options List which may include one unit from outside the Faculty	
Relevant Options List for Year 2 Semester 1	
NQB322	Invertebrate Biology
NQB323	Plant Biology
Elective	
Year 2 Semester 2	
NQB403	Soils and the Environment
NQB421	Experimental Design
Plus TWO units from the relevant options List which may include one unit from outside the Faculty	
Relevant Options List for Year 2 Semester 2	
NQB422	Genetics and Evolution
NQB423	Vertebrate Biology
Elective	
Year 3 Semester 1	
BSB115	Management
NQB501	Environmental Modelling
STB551	Engaging with the Innovation Industry
Plus ONE of the two following units:	
NQB502	Field Methods in Natural Resource Sciences
NQB503	Spatial Analysis of Environmental Systems
Year 3 Semester 2	
BSB126	Marketing
MGB223	Entrepreneurship and Innovation
NQB601	Sustainable Environmental Management
Plus ONE of the three following units:	
NQB602	Environmental Chemistry
NQB614	Groundwater Systems
NQB623	Ecological Systems
Year 4 Semester 1	
AMB240	Marketing Planning and Management
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
STB709-1	Innovation and Commercialisation Project
Year 4 Semester 2	
BSB311	Innovation Commercialisation Strategies
MGB225	Intercultural Communication and Negotiation Skills
STB709-2	Innovation and Commercialisation Project
STB709-3	Innovation and Commercialisation Project

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Associate Professor Chris Collet
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why Choose This Course

If you like to work in a dynamic world of translating discovery and creativity into commercial products, meeting people, and working in a high-powered team environment to build money-making enterprises, then this course is for you. The Bachelor of Technology Innovation will allow a rapid entry into the high-flying world of commercialisation and technology transfer. This new degree builds upon the successful Bachelor of Biotechnology Innovation which has seen graduates realise outstanding job outcomes, often successfully competing against graduates with PhDs and MBAs.

Professional Recognition

Graduates may be eligible for membership of the Australian and New Zealand Forensic Society (ANZFSS), AusBiotech Ltd, the Australian Society for Biochemistry and Molecular Biology (ASBMB), and the Royal Australian Chemical Institute (RACI).

Your Course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Domestic Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Bachelor of Technology Innovation (Forensic Science)

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

International Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

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	
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
Cellular Basis of Life	
Plus ONE from the following four units:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
NOTE: Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101	
Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105	
Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB121	
Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB120	
Year 1, Semester 2	
SCB121	Chemistry 2

Cell and Molecular Biology	
SCB123	Physical Science Applications
SCB131	Experimental Chemistry
Year 2, Semester 1	
LQB383	Molecular and Cellular Regulation
SCB384	Forensic Sciences - From Crime Scene to Court
Plus TWO units from the relevant options List which may include one unit from outside the Faculty	
Relevant Options List Year 2 Semester 1	
PQB331	Structure and Bonding
Elective	
Year 2, Semester 2	
JSB173	Understanding the Criminal Justice System
PQB312	Analytical Chemistry For Scientists and Technologists
Plus TWO units from the relevant options List which may include one unit from outside the Faculty	
Relevant Options List Year 2 Semester 2	
PQB442	Chemical Spectroscopy
Elective	
Year 3, Semester 1	
BSB115	Management
PQB513	Instrumental Analysis
PQB584	Forensic Physical Evidence
STB551	Engaging with the Innovation Industry
Year 3, Semester 2	
BSB126	Marketing
MGB223	Entrepreneurship and Innovation
PQB680	Forensic DNA Profiling
(LQB680 changed to PQB680 in 2013.)	
PQB684	Forensic Analysis
Year 4, Semester 1	
AMB240	Marketing Planning and Management
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
STB709-1	Innovation and Commercialisation Project
Year 4, Semester 2	
BSB311	Innovation Commercialisation Strategies
MGB225	Intercultural Communication and Negotiation Skills
STB709-2	Innovation and Commercialisation Project
STB709-3	Innovation and Commercialisation Project

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Associate Professor Chris Collet
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why Choose This Course

If you like to work in a dynamic world of translating discovery and creativity into commercial products, meeting people, and working in a high-powered team environment to build money-making enterprises, then this course is for you. The Bachelor of Technology Innovation will allow a rapid entry into the high-flying world of commercialisation and technology transfer. This new degree builds upon the successful Bachelor of Biotechnology Innovation which has seen graduates realise outstanding job outcomes, often successfully competing against graduates with PhDs and MBAs.

Professional Recognition

No professional accreditation is currently available for courses in the games and entertainment area.

Your Course

Year 1

You will be able to choose subjects from

across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Domestic Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the

Bachelor of Technology Innovation (Games Technology)

science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

International Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual

property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

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](#)
- [Year 4 Semester 1](#)
- [Year 4 Semester 2](#)
- [BLOCK C Minor Units List](#)
- [ANIMATION:](#)
- [ADVANCED SOFTWARE TECHNOLOGIES:](#)
- [DIGITAL MEDIA:](#)
- [GAME DESIGN:](#)
- [MATHEMATICS FOR GAMES:](#)
- [MOBILE AND NETWORK TECHNOLOGIES:](#)
- [SOUND DESIGN:](#)
- [PHYSICS FOR GAMES:](#)

Code	Title
The course consists of four blocks of studies	
Core Studies - 13 units (156 credit points)	
Major - 13 units (156 credit points)	
Minor - 4 units (48 credit points)	
Electives - 2 units (24 credit points)	
Year 1 Semester 1	
INB101	Impact of IT
INB104	Building IT Systems
INB180	Computer Games Studies
INB182	Introducing Design
Year 1 Semester 2	
INB103	Industry Insights
INB181	Introduction to Games Production
INB270	Programming
MAB281	Mathematics for Computer Graphics
Year 2 Semester 1	
INB370	Software Development

INB371	Data Structures and Algorithms
Block C or Block D Unit	
Block C or Block D Unit	
Year 2 Semester 2	
INB210	Databases
INB250	Foundations of Computer Science
INB381	Modelling and Animation Techniques
Block C or Block D Unit	
Year 3 Semester 1	
BSB115	Management
STB551	Engaging with the Innovation Industry
Block C or Block D Unit	
Plus ONE of the following two units:	
INB382	Real Time Rendering Techniques
INB383	AI for Games
Year 3 Semester 2	
BSB126	Marketing
MGB223	Entrepreneurship and Innovation
Block C or Block D Unit	
Block C or Block D Unit	
Year 4 Semester 1	
AMB240	Marketing Planning and Management
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
STB709-1	Innovation and Commercialisation Project
Year 4 Semester 2	
BSB311	Innovation Commercialisation Strategies
MGB225	Intercultural Communication and Negotiation Skills
STB709-2	Innovation and Commercialisation Project
STB709-3	Innovation and Commercialisation Project
BLOCK C Minor Units List	
ANIMATION:	
KIB105	Animation and Motion Graphics
Animation History and Practices	
Animation History and Practices	
Character Development, Conceptual Design and Animation Layout	
KVB105	Drawing for Design
KVB106	Drawing for Animation
ADVANCED SOFTWARE TECHNOLOGIES:	
INB365	Systems Programming
INB372	Agile Software Development
INB374	Enterprise Software Architecture
Plus ONE from the following two units:	
INB382	Real Time Rendering Techniques
INB383	AI for Games
DIGITAL MEDIA:	
KIB101	Visual Communication
KIB102	Visual Interactions
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
GAME DESIGN:	

Bachelor of Technology Innovation (Games Technology)

KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion
INB280	Fundamentals of Game Design
Plus ONE from the following two units:	
INB272	Interaction Design
INB281	Advanced Game Design
MATHEMATICS FOR GAMES:	
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
MAB122	Linear Algebra and Multivariable Calculus
MAB312	Linear Algebra
[Students who have completed Maths C can substitute MAB120 with one of the following units: MAB311, MAB481 or MAB422]	
MOBILE AND NETWORK TECHNOLOGIES:	
INB102	Emerging Technology
INB251	Networks
INB350	Internet Protocols and Services
INB353	Wireless and Mobile Networks
SOUND DESIGN:	
KMB107	Sound, Image, Text
KMB119	Music and Sound Production 1
KMB129	Music and Sound Production 2
KMB252	Multi-Platform Sound Design
KKB216	Audio/Visual Interaction
PHYSICS FOR GAMES:	
MAB121	Single Variable Calculus and Differential Equations
PQB250	Mechanics and Electromagnetism
PQB251	Waves and Optics
Plus ONE from the following three units:	
PQB450	Energy, Fields and Radiation
PQB460	Astrophysics 1
PCB593	Digital Image Processing

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Associate Professor Chris Collet
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why Choose This Course

If you like to work in a dynamic world of translating discovery and creativity into commercial products, meeting people, and working in a high-powered team environment to build money-making enterprises, then this course is for you. The Bachelor of Technology Innovation will allow a rapid entry into the high-flying world of commercialisation and technology transfer. This new degree builds upon the successful Bachelor of Biotechnology Innovation which has seen graduates realise outstanding job outcomes, often successfully competing against graduates with PhDs and MBAs.

Professional Recognition

Graduates are eligible for membership of the Australasian Institute of Mining and Metallurgy (AIMM), Australian Institute of Geoscientists (AIG), and the Geological Society of Australia (GSA).

Your Course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Domestic Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Bachelor of Technology Innovation (Geoscience)

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

International Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

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	
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
Cellular Basis of Life	
Plus ONE of the following four units:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
NOTE: Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101	
Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105	
Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB121	
Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB120	
Year 1 Semester 2	
NQB201	Planet Earth

NQB202	History of Life on Earth
SCB123	Physical Science Applications
SCB222	Exploration of the Universe
Year 2 Semester 1	
NQB311	Mineralogy
NQB314	Sedimentary Geology
Plus TWO units from the relevant options List which may include one unit from outside the Faculty	
Relevant Options List for Year 2 Semester 1	
NQB302	Earth Surface Systems
UDB281	Geographic Information Systems
Elective	
Year 2 Semester 2	
NQB411	Petrology of Igneous and Metamorphic Rocks
NQB412	Structural Geology and Field Methods
Plus TWO units from the relevant options List which may include one unit from outside the Faculty	
Relevant Options List for Year 2 Semester 2	
NQB403	Soils and the Environment
NQB413	Stratigraphy
Elective	
Year 3 Semester 1	
BSB115	Management
NQB502	Field Methods in Natural Resource Sciences
NQB513	Geophysics
STB551	Engaging with the Innovation Industry
Year 3 Semester 2	
BSB126	Marketing
MGB223	Entrepreneurship and Innovation
NQB615	Geochemistry
Plus ONE from the following three units:	
NQB612	Basin Analysis and Petroleum Geology
NQB613	Plate Tectonics
NQB614	Groundwater Systems
Year 4 Semester 1	
AMB240	Marketing Planning and Management
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
STB709-1	Innovation and Commercialisation Project
Year 4 Semester 2	
BSB311	Innovation Commercialisation Strategies
MGB225	Intercultural Communication and Negotiation Skills
STB709-2	Innovation and Commercialisation Project
STB709-3	Innovation and Commercialisation Project

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Associate Professor Chris Collet
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Professional Recognition

On graduation, you will be eligible to join professional organisations relevant to your disciplinary specialisation, the Association of Professional Engineers, Scientists and Managers, Australia and the Australian Institute of Management.

Your Course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and

technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Domestic Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills

Bachelor of Technology Innovation (Information Technology)

development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

International Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial

mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

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](#)
- [Information Technology Breadth Options List](#)
- [Information Technology Specialisation Options List](#)

Code	Title
Year 1 Semester 1	
INB101	Impact of IT
INB102	Emerging Technology
INB103	Industry Insights
INB104	Building IT Systems
Year 1 Semester 2	
Choose THREE units from the IT Breadth Options List	
Plus ONE unit which may be any Faculty of Science and Technology unit or a unit from another Faculty	
Please note that students must take a total of TWO Faculty of Science and Technology Units and a total of TWO units from another Faculty	
Year 2 Semester 1	
INB201	Scalable Systems Development
Plus ONE unit from the IT Breadth Options List	
Plus ONE unit which may be any Faculty of Science and Technology unit or a unit from another Faculty	
Plus ONE unit from the IT Specialisation Options List	
Please note that students must take a total of TWO Faculty of Science and Technology Units and a total of TWO units from another Faculty	
Year 2 Semester 2	
Choose ONE unit from the IT Specialisation Options List	
Plus TWO units which may be any Faculty of Science and Technology unit or a unit from another Faculty	
Plus ONE unit either from the IT Breadth Options List or the IT Specialisation Options List	
Please note that students must take a total of TWO Faculty of Science and Technology Units and a total of TWO units from another Faculty	
Year 3 Semester 1	
BSB115	Management
STB551	Engaging with the Innovation Industry

Plus ONE unit from the IT Specialisation Options List	
Plus ONE unit either from the IT Breadth Options List or the IT Specialisation Options List	
Year 3 Semester 2	
BSB126	Marketing
MGB223	Entrepreneurship and Innovation
Plus ONE unit from the IT Specialisation Options List	
Plus ONE unit either from the IT Breadth Options List or the IT Specialisation Options List	
Year 4 Semester 1	
AMB240	Marketing Planning and Management
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
STB709-1	Innovation and Commercialisation Project
Year 4 Semester 2	
BSB311	Innovation Commercialisation Strategies
MGB225	Intercultural Communication and Negotiation Skills
STB709-2	Innovation and Commercialisation Project
STB709-3	Innovation and Commercialisation Project
Information Technology Breadth Options List	
Students must complete FOUR units from the following list:	
INB120	Corporate Systems
INB210	Databases
INB220	Business Analysis
INB250	Foundations of Computer Science
INB251	Networks
INB255	Security
INB270	Programming
INB271	The Web
INB272	Interaction Design
Information Technology Specialisation Options List	
Students must complete FOUR units from the following list. Please ensure you have completed a minimum of 36 credit points (3 units) of IT Breadth Option Units before commencing these units.	
ENTERPRISE SYSTEMS:	
INB123	Project Management Practice
INB221	Technology Management
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
WEB TECHNOLOGIES:	
INB313	Electronic Commerce Site Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
BUSINESS PROCESS MANAGEMENT:	
INB320	Business Process Modelling
INB321	Business Process Improvement
INB322	Information Systems Consulting
Smart Services	

Bachelor of Technology Innovation (Information Technology)

DATA WAREHOUSING:	
INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining and Data Analysis
INB343	Data Warehousing and Mining
NETWORK SYSTEMS:	
INB350	Internet Protocols and Services
INB351	Unix Network Administration
INB352	Network Planning
INB353	Wireless and Mobile Networks
SOFTWARE ENGINEERING:	
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Agile Software Development
INB374	Enterprise Software Architecture
DIGITAL ENVIRONMENTS	
Information Issues and Values	
INB345	Mobile and Ubiquitous Computing
INB346	Enterprise 2.0
INB347	Web 2.0 Applications
UNGROUPEd UNITS:	
INB355	Cryptology and Protocols
INB365	Systems Programming
INB860	Computational Intelligence for Control and Embedded Systems

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Associate Professor Chris Collet
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Professional Recognition

Graduates are eligible for membership of the Australian Society for Microbiology (ASM).

Your Course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the

business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Domestic Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development

Bachelor of Technology Innovation (Microbiology)

will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

International Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through

networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

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	
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
Cellular Basis of Life	
Plus ONE from the following four units:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
NOTE: Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101	
Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105	
Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB121	
Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB120	
Year 1 Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
Cell and Molecular Biology	
SCB123	Physical Science Applications
Year 2 Semester 1	
LQB381	Biochemistry: Structure and Function
LQB386	Microbial Structure and Function
Plus TWO units from the relevant options List which may include one unit from outside the Faculty	
Relevant Options List for Year 2 Semester 1:	
LQB383	Molecular and Cellular Regulation
LQB388	Medical Physiology 1
Elective	
Year 2 Semester 2	
LQB483	Molecular Biology Techniques
LQB486	Clinical Microbiology 1
Plus TWO units from the relevant options List which may include one unit from outside the Faculty	
Relevant Options List for Year 2 Semester 2:	

LQB481	Biochemical Pathways and Metabolism
LQB484	Introduction to Genomics and Bioinformatics
LQB488	Medical Physiology 2
LQB489	Plant Physiology and Cell Biology
Elective	
Year 3 Semester 1	
BSB115	Management
LQB586	Clinical Microbiology 2
LQB587	Applied Microbiology 1: Water, Air and Soil
STB551	Engaging with the Innovation Industry
Year 3 Semester 2	
BSB126	Marketing
MGB223	Entrepreneurship and Innovation
LQB686	Microbial Technology and Immunology
LQB687	Applied Microbiology 2: Food and Quality Assurance
Year 4 Semester 1	
AMB240	Marketing Planning and Management
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
STB709-1	Innovation and Commercialisation Project
Year 4 Semester 2	
BSB311	Innovation Commercialisation Strategies
MGB225	Intercultural Communication and Negotiation Skills
STB709-2	Innovation and Commercialisation Project
STB709-3	Innovation and Commercialisation Project

Handbook

Year	2013
QUT code	ST50
CRICOS	070694G
Duration (full-time)	4 years
Duration (part-time domestic)	8 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Associate Professor Chris Collet
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

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
- English
- Chemistry

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why Choose This Course

If you like to work in a dynamic world of translating discovery and creativity into commercial products, meeting people, and working in a high-powered team environment to build money-making enterprises, then this course is for you. The Bachelor of Technology Innovation will allow a rapid entry into the high-flying world of commercialisation and technology transfer. This new degree builds upon the successful Bachelor of Biotechnology Innovation which has seen graduates realise outstanding job outcomes, often successfully competing against graduates with PhDs and MBAs.

Professional Recognition

Graduates are eligible for membership of the Australian Institute of Physics (AIP).

Your Course

Year 1

You will be able to choose subjects from across a range of science and technology

areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

Domestic Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A

Bachelor of Technology Innovation (Physics)

thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

International Course structure

Your course

Year 1

You will be able to choose subjects from across a range of science and technology areas to help you define your choice of disciplinary major. The introductory core studies will provide you with a solid foundation in your chosen disciplinary skills and build the basis for future studies.

Year 2

You will be introduced to advanced theoretical concepts and practical skills that serve to build your expertise in the science and technology disciplines. A thorough understanding of science and technology theory and practice is necessary to understand, evaluate and communicate aspects of innovation to the business world.

Year 3

In third year, you will complete your science and technology disciplinary advanced studies and take basic and advanced business units that encompass the business of innovation, intellectual property law and professional skills

development. Through the action learning framework of the Student Enterprise Scheme, professional skills development will concentrate on communication and team-building skills. These exercises will help prepare you for industry-based consultancy style projects and extra-curricular networking events and an industry career.

Year 4

You will undertake integrative business units that develop the entrepreneurial mindset needed for a career in innovation commercialisation. You will further develop your professional skills through networking events. Student teams will source an industry-based consultancy-style project that will serve to provide real world experience and ready you for your future career.

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	
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
Cellular Basis of Life	
Plus ONE from the following four units:	
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB120	Foundations of Calculus and Algebra
MAB121	Single Variable Calculus and Differential Equations
NOTE: Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101	
Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105	
Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB121	
Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB120	
Year 1 Semester 2	
MAB122	Linear Algebra and Multivariable Calculus
PQB250	Mechanics and Electromagnetism
PQB251	Waves and Optics
Plus ONE from the following two units	
MAB121	Single Variable Calculus and Differential Equations
MAB220	Computational Mathematics 1

Year 2 Semester 1	
MAB311	Advanced Calculus
PQB350	Thermodynamics of Solids and Gases
Plus TWO units from the relevant options List which may include one unit from outside the Faculty	
Relevant Unit Options List for Year 2, Semester 1:	
PCB593	Digital Image Processing
PQB360	Global Energy Balance and Climate Change
Elective	
Year 2 Semester 2	
PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation
Plus TWO ADVANCED units offered by the Faculty of Science and Technology	
Relevant Unit Options List for Year 2, Semester 2:	
PQB460	Astrophysics 1
Year 3 Semester 1	
BSB115	Management
PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques
STB551	Engaging with the Innovation Industry
Year 3 Semester 2	
BSB126	Marketing
MGB223	Entrepreneurship and Innovation
PQB650	Advanced Theoretical Physics
PQB651	Experimental Physics
Year 4 Semester 1	
AMB240	Marketing Planning and Management
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth
STB709-1	Innovation and Commercialisation Project
Year 4 Semester 2	
BSB311	Innovation Commercialisation Strategies
MGB225	Intercultural Communication and Negotiation Skills
STB709-2	Innovation and Commercialisation Project
STB709-3	Innovation and Commercialisation Project

Handbook

Year	2013
QUT code	UD40
CRICOS	056387B
Duration (full-time)	4 years
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,400 per Semester (48 credit points)
International fee (indicative)	2013: \$12,700 per Semester
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	Chris Eves

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.0

Handbook

Year	2013
QUT code	UD40
CRICOS	056387B
Duration (full-time)	4 years
OP	8
Rank	85
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,400 per Semester (48 credit points)
International fee (indicative)	2013: \$12,700 per Semester
Total credit points	384
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Chris Eves
Discipline Coordinator	Dr Matthew 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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.0

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 [your course rules](#) 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.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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 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

Bachelor of Urban Development (Construction Management)

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 [your course rules](#) 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 [your course rules](#) 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 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	
UDB100	Urban Development and Sustainability
UDB101	Stewardship of Land
UDB110	Residential Construction and Engineering
UDB111	Engineering Construction Materials
Year 1 - Semester 2	
UDB200	Project Planning in Urban Development
UDB104	Urban Development Economics
UDB112	Professional Studies 1
UDB113	Measurement 1
Year 2 - Semester 1	
UDB210	Commercial Construction and Engineering
UDB211	Introductory Structural Engineering
UDB212	Measurement 2
UDB213	Construction Estimating
Year 2 - Semester 2	
UDB102	Applied Law
UDB214	Professional Studies 2
UDB215	Building Services Engineering
Minor unit	

Year 3 - Semester 1	
UDB310	Highrise Construction and Engineering
UDB311	Structural Engineering Design
UDB312	Contract Administration
Minor unit	
Year 3 - Semester 2	
UDB202	Business Skills
UDB314	Statutory Construction Law
UDB420	Project Administration
Minor unit	
Year 4 - Semester 1	
BEB701	Work Integrated Learning 1
UDB301	Research Methods
UDB313	Programming and Scheduling
Minor unit	
Year 4 - Semester 2	
BEB801	Project 1
UDB302	Development Process
UDB316	Cost Planning and Control
UDB410	Strategic Construction Management

Handbook

Year	2013
QUT code	UD40
CRICOS	056387B
Duration (full-time)	4 years
OP	10
Rank	80
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,400 per Semester (48 credit points)
International fee (indicative)	2013: \$12,700 per Semester
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	Chris Eves
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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.0

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.

Special Course Requirements

You are required to obtain a minimum of 30 days approved professional work experience.

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.

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 [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.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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 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

Bachelor of Urban Development (Property Economics)

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 industry-focused 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 industry-focused 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 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	
UDB100	Urban Development and Sustainability
UDB101	Stewardship of Land
UDB110	Residential Construction and Engineering
UDB140	Property Valuation 1
Year 1 - Semester 2	
UDB200	Project Planning in Urban Development
UDB102	Applied Law
UDB104	Urban Development Economics
UDB141	Building Studies
Year 2 - Semester 1	
UDB240	Planning Theory and Processes
UDB241	Property Law 1
UDB242	Property Valuation 2
UDB243	Property Economics
Year 2 - Semester 2	
UDB244	Property Law 2
UDB245	Urban Land Studies
UDB246	Property Feasibility Studies
UDB247	Property Valuation 3
Year 3 - Semester 1	
UDB301	Research Methods
UDB341	Property Finance
Second Major/Minor unit	
Second Major/Minor unit	
Year 3 - Semester 2	
UDB302	Development Process
UDB344	Property and Asset Management
Second Major/Minor unit	
Second Major/Minor unit	
Year 4 - Semester 1	
UDB340	Agency Practice and Marketing
UDB342	Real Estate Accounting and Taxation
Second Major/Minor unit	
Second Major/Minor unit	
Year 4 - Semester 2	
BEB701	Work Integrated Learning 1
UDB202	Business Skills
Second Major/Minor unit	
Second Major/Minor unit	

Handbook

Year	2013
QUT code	UD40
CRICOS	056387B
Duration (full-time)	4 years
OP	8
Rank	85
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,400 per Semester (48 credit points)
International fee (indicative)	2013: \$12,700 per Semester
Total credit points	384
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Chris Eves
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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.0

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 [your course rules](#) 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 [anywhere in QUT](#). Remember if you take two Minors, one Minor must be from outside the UD40 course.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sf.enquiry@qut.edu.au

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 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 [your course rules](#) 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
- International Minor
- Indigenous Studies Minor
- Research Minor

- Project Collaboration Minor
- Collaborative Digital Design Minor

A minor from [anywhere in QUT](#).

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 [your course rules](#) 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
- International Minor
- Indigenous Studies Minor
- Research Minor
- Project Collaboration Minor
- Collaborative Digital Design Minor

A minor from [anywhere in QUT](#).

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	
UDB100	Urban Development and Sustainability
UDB101	Stewardship of Land
UDB110	Residential Construction and Engineering
UDB111	Engineering Construction Materials
Year 1- Semester 2	
UDB200	Project Planning in Urban Development

Bachelor of Urban Development (Quantity Surveying)

UDB104	Urban Development Economics
UDB112	Professional Studies 1
UDB113	Measurement 1
Year 2 - Semester 1	
UDB210	Commercial Construction and Engineering
UDB212	Measurement 2
UDB213	Construction Estimating
UDB216	The Environment and the Quantity Surveyor
Year 2 - Semester 2	
UDB102	Applied Law
UDB202	Business Skills
UDB215	Building Services Engineering
Second Major/Minor unit	
Year 3 - Semester 1	
UDB310	Highrise Construction and Engineering
UDB312	Contract Administration
UDB315	Measurement 3
Second Major/Minor unit	
Year 3 - Semester 2	
UDB314	Statutory Construction Law
UDB316	Cost Planning and Control
Second Major/Minor unit	
Second Major/Minor unit	
Year 4 - Semester 1	
BEB701	Work Integrated Learning 1
UDB301	Research Methods
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	

Handbook

Year	2013
QUT code	UD40
CRICOS	056387B
Duration (full-time)	4 years
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,400 per Semester (48 credit points)
International fee (indicative)	2013: \$12,700 per Semester
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	Chris Eves
Discipline Coordinator	Mr Robert Webb

Domestic Assumed knowledge

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

- Maths B
- 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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.0

Overview

This degree is a broad-based course. The first year is a foundation year designed to prepare students to deliver practical solutions to problems involving spatial information and decision-making. Students study foundation units such as mathematics, professional studies, sustainability as well as geospatial positioning in their first year. In the following years, the areas covered are boundary and control surveying, topographic mapping, photogrammetry, mine and hydrographic surveying, land development design and geographic information systems.

Professional Recognition

The course is recognised by Queensland Surveyors Board and the Surveying and Spatial Science Institute of Australia (SSSI).

Special Course Requirements

You will be required to attend compulsory field practicals off-campus in the Moreton Region and have access to an advanced scientific calculator for use during the course. To graduate you are required to have at least 90 days of approved industrial experience/practice in a spatial science/ surveying environment.

Minors

For professional recognition you will undertake two minors (a minor is four units or 48 credit points in the same discipline) the first is a Science minor which includes Maths and the second an Applications minor which consists of a Work Integrated Learning unit, a project unit and two specialised spatial science units.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Domestic Course structure Work Integrated Learning unit

To graduate, students are required to undertake at least 90 days of approved industrial experience/practice in a spatial science/surveying environment.

Your course

Year 1

You undertake foundation units where you study broad aspects of the built environment, stewardship of land and foundation mathematics to assist with an understanding of geospatial information and measurement science/surveying. A number of experiential field practicals support the study of introductory surveying techniques.

Year 2

You undertake further measurement-related study applied to cadastral surveying and computations. Digital mapping, GIS and remote sensing studies, that broaden measurement and analysis aspects, are introduced. Land development, measurement science and mapping/GIS themes are structured as a sequential learning process.

Year 3

Multidisciplinary land development units are undertaken to reflect real-world development projects. Land information management study supports the 'big-picture' view of sustainable developments while the geodesy theory unit covers high-precision state-of-the-art technology measurement applications. Project-based learning through spatial analysis practice is encouraged in this third year of study.

Year 4

Your final year prepares you for entry into the spatial information industry. Study units provide opportunities to gain interdisciplinary skills and specialist

Bachelor of Urban Development (Spatial Science)

spatial measurement and presentation skills. Project and work-integrated learning units allow for industry work experiences and exposure to the diversity of workplace cultures.

Minors

For professional recognition you will undertake two minors (a minor is four units or 48 credit points in the same discipline) the first is a Science minor which includes Maths and the second an Applications minor which consists of a Work Integrated Learning unit, a project unit and two specialised spatial science units.

International Course structure

Work Integrated Learning unit

To graduate, students are required to undertake at least 90 days of approved industrial experience/practice in a spatial science/surveying environment.

Your course

Year 1

You undertake foundation units where you study broad aspects of the built environment, stewardship of land and foundation mathematics to assist with an understanding of geospatial information and measurement science/surveying. A number of experiential field practicals support the study of introductory surveying techniques.

Year 2

You undertake further measurement-related study applied to cadastral surveying and computations. Digital mapping, GIS and remote sensing studies, that broaden measurement and analysis aspects, are introduced. Land development, measurement science and mapping/GIS themes are structured as a sequential learning process.

Year 3

Multidisciplinary land development units are undertaken to reflect real-world development projects. Land information management study supports the 'big-picture' view of sustainable developments while the geodesy theory unit covers high-precision state-of-the-art technology measurement applications. Project-based learning through spatial analysis practice is encouraged in this third year of study.

Year 4

Your final year prepares you for entry into the spatial information industry. Study units provide opportunities to gain interdisciplinary skills and specialist

spatial measurement and presentation skills. Project and work-integrated learning units allow for industry work experiences and exposure to the diversity of workplace cultures.

Minors

For professional recognition you will undertake two minors (a minor is four units or 48 credit points in the same discipline) the first is a Science minor which includes Maths and the second an Applications minor which consists of a Work Integrated Learning unit, a project unit and two specialised spatial science 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 2](#)
- [Year 4 - Semester 1](#)
- [Year 4 - Semester 2](#)

Code	Title
Year 1 - Semester 1	
UDB100	Urban Development and Sustainability
MAB120	Foundations of Calculus and Algebra
UDB101	Stewardship of Land
UDB181	Geospatial Positioning and GPS
Year 1 - Semester 2	
UDB200	Project Planning in Urban Development
MAB101	Statistical Data Analysis 1
UDB104	Urban Development Economics
UDB182	Surveying
Year 2 - Semester 1	
PCB172	Physics for Surveyors
UDB281	Geographic Information Systems
UDB283	Surveying Computations
UDB285	Cadastral Surveying
Year 2 - Semester 2	
MAB730	Surveying Mathematics 2
UDB102	Applied Law
UDB282	Remote Sensing
UDB284	Engineering Surveying
Year 3 - Semester 1	
UDB381	Geospatial Mapping
UDB383	Control Surveying and Analysis
UDB385	Cadastral and Land Management
UDB387	Spatial and Land Information Management
Year 3 - Semester 2	
UDB202	Business Skills
UDB302	Development Process
UDB382	Photogrammetric Mapping
UDB384	Geodesy

Year 4 - Semester 1	
BEB701	Work Integrated Learning 1
UDB301	Research Methods
UDB483	Global Positioning Principles and Practice
UDB485	Property Development Practice
Year 4 - Semester 2	
BEB801	Project 1
UDB388	Spatial Analysis Practice
UDB484	Topographic, Hydrographic and Mining Surveying
UDB486	Cadastral Practice

Handbook

Year	2013
QUT code	UD40
CRICOS	056387B
Duration (full-time)	4 years
OP	8
Rank	85
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,400 per Semester (48 credit points)
International fee (indicative)	2013: \$12,700 per Semester
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	Chris Eves
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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.0

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.

Professional Recognition

This course has received accreditation from the Planning Institute of Australia.

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 [your course rules](#) 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](#)

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

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.

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,

Bachelor of Urban Development (Urban and Regional Planning)

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 [your course rules](#) 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 [your course rules](#) 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](#).

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	
UDB100	Urban Development and Sustainability
UDB101	Stewardship of Land
UDB161	Introduction to Planning and Design
UDB162	History of Built Environment
Year 1 - Semester 2	
UDB104	Urban Development Economics
UDB163	Land Use Planning
UDB164	Population and Urban Studies
UDB200	Project Planning in Urban Development
Year 2 - Semester 1	
UDB265	Site Planning
UDB266	Planning Processes and Consultations
UDB281	Geographic Information Systems
Minor unit	
Year 2 - Semester 2	
UDB102	Applied Law
UDB202	Business Skills
UDB267	Development Assessment and Infrastructure
Minor unit	
Year 3 - Semester 1	
UDB368	Urban Design
UDB369	Negotiation and Conflict Resolution
UDB381	Geospatial Mapping
Minor unit	
Year 3 - Semester 2	
BEB801	Project 1
UDB302	Development Process
UDB370	Environmental Planning and Management
Minor unit	
Year 4 - Semester 1	
BEB701	Work Integrated Learning 1
UDB301	Research Methods

Bachelor of Urban Development (Urban and Regional Planning)

UDB471	Urban Planning Practice
UDB473	Planning Theory and Ethics
Year 4 - Semester 2	
BEB802	Project 2
UDB472	Community Planning
UDB474	Regional Planning Practice
UDB475	Regional and Metropolitan Policy

Handbook

Year	2013
QUT code	UD40
CRICOS	056387B
Duration (full-time)	4 years
OP	99
Rank	1
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,400 per Semester (48 credit points)
Start months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012.
Int. Start Months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012.
Discipline Coordinator	

Domestic Entry requirements 2013 questionnaires have closed

Questionnaires for the 2013 intake were due to completed on the 16 November 2012 and are now closed. If you had not submitted the questionnaire and you are considering applying to study in 2014 we recommend you read the following information as a guide only as it details requirements for entry in 2013 and these may change prior to the 2014 intake. You may also wish to consider applying for the standard entry program for 2013 entry.

Prerequisites

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Additional entry requirements

In addition to applying through QTAC and you must also submit the [online Science and Engineering Dean's Scholars questionnaire](#) by the closing date.

Please note submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Closing date

Submit the [online questionnaire](#) with QUT by Friday, 16 November 2012.

Domestic Assumed knowledge

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

- Chemistry

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

International Entry requirements

Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional entry requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available October) by the closing date.

Please note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Applicants will be notified via email when the questionnaire is available.

Minimum english requirements

Students must meet the English proficiency requirements.

Eligibility Criteria

Applicants must:

- have completed Year 12 in the year they apply for the program, or the previous year
- have received an OP 1 (or equivalent)
- be starting university for the first time
- demonstrate leadership experience and potential
- demonstrate community participation and engagement
- apply for and gain a place in the relevant Dean's Scholars Program

If studying at QUT International College (QUTIC), applicant must have a grade point average (GPA) of at least 6.5 for the two semesters immediately before they apply for the Dean's Scholars Program.

If expecting to get an OP of 1-3, applicant should apply for consideration.

Financial Support

Successful applicants will receive:

- A scholarship of up to \$6,000 per annum, usually payable in 2 instalments of \$3,000 by the 2nd week of semester 1 and semester 2 of each year. The scholarship would apply for the full-time duration of the undergraduate degree, contingent upon students meeting the conditions of the program (refer to Conditions below). The total value of the scholarship is limited to \$18,000 for the 3 year programs and \$24,000 for the 4 year

Bachelor of Urban Development - Dean's Scholars Program

programs.

Conditions

To keep a place in the Dean's Scholars program, students must:

- maintain enrolment full-time in the eligible undergraduate course
- graduate from the Bachelor of Engineering within 4 years of starting, except where you've taken a leave of absence approved by the Assistant Dean, or there are other extenuating circumstances
- maintain a grade point average (GPA) of at least 6.0 each semester
- meet the requirements of program completion (for example work experience and work integrated learning)
- pay any costs associated with their program that aren't covered by the scholarship, including additional and repeated units
- demonstrate adequate participation in extracurricular elements of the program.

Students can:

- apply to change their course structure under exceptional circumstances. Students must apply through their academic mentor or course coordinator, and receive prior written approval from the Assistance Dean International and Engagement.
- apply [for other scholarships and bursaries](#), including ones associated with travel, as long as they are allowed to under the conditions of the other scholarship and under our [Industry sponsored student scholarships policy](#).

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Course Structures

For full course structure details, please see [EN40 Bachelor of Urban Development](#)

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	

UDB100	Urban Development and Sustainability
UDB101	Stewardship of Land
UDB110	Residential Construction and Engineering
UDB111	Engineering Construction Materials
Year 1 - Semester 2	
UDB200	Project Planning in Urban Development
UDB104	Urban Development Economics
UDB112	Professional Studies 1
UDB113	Measurement 1
Year 2 - Semester 1	
UDB210	Commercial Construction and Engineering
UDB211	Introductory Structural Engineering
UDB212	Measurement 2
UDB213	Construction Estimating
Year 2 - Semester 2	
UDB102	Applied Law
UDB214	Professional Studies 2
UDB215	Building Services Engineering
Minor unit	
Year 3 - Semester 1	
UDB310	Highrise Construction and Engineering
UDB311	Structural Engineering Design
UDB312	Contract Administration
Minor unit	
Year 3 - Semester 2	
UDB202	Business Skills
UDB314	Statutory Construction Law
UDB420	Project Administration
Minor unit	
Year 4 - Semester 1	
BEB701	Work Integrated Learning 1
UDB301	Research Methods
UDB313	Programming and Scheduling
Minor unit	
Year 4 - Semester 2	
BEB801	Project 1
UDB302	Development Process
UDB316	Cost Planning and Control
UDB410	Strategic Construction Management

Handbook

Year	2013
QUT code	IF21
CRICOS	020329J
Duration (full-time)	5 years
OP	7
Rank	87
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,800 per Semester
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	Professor Wageeh Boles(Engineering); Dr Tim Moroney (Mathematics)
Discipline Coordinator	Professor Wageeh Boles(Engineering); Professor Helen MacGillivray (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

- Maths B
- 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 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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 Australian Mathematical Society. You may also become a member of the Statistical Society of Australia.

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 [scholarships](#).

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).

Further Information

For further information about this course, please contact the following:

Engineering Coordinator

Professor Wageeh Boles
Phone: 3138 8822
Email: sef.enquiry@qut.edu.au

Mathematics Coordinator

Dr Tim Moroney
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

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.

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.

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](#)
- [Year 5, Semester 1](#)
- [Year 5, Semester 2](#)
- [Electrical Engineering Selectives](#)

Code	Title
Course Notes	
For students with four semesters of Senior Mathematics B (or equivalent) only, with an exit assessment of at least Sound Achievement.	
Year 1, Semester 1	
ENB100	Engineering and Sustainability
ENB130	Mechanical and Thermal Energy
MAB120	Foundations of Calculus and Algebra
MAB220	Computational Mathematics 1
Year 1, Semester 2	
ENB200	Introducing Engineering Systems
ENB120	Electrical Energy and Measurements
MAB121	Single Variable Calculus and Differential Equations
MAB122	Linear Algebra and Multivariable Calculus
Year 2, Semester 1	
ENB110	Engineering Statics and Materials
ENB250	Electrical Circuits
MAB233	Engineering Mathematics 3
MAB311	Advanced Calculus
Year 2, Semester 2	
ENB150	Introducing Engineering Design
MAB210	Probability and Stochastic Modelling 1
MAB413	Differential Equations
Mathematics Elective (Level 2)	
Year 3, Semester 1	
ENB240	Introduction To Electronics
ENB246	Engineering Problem Solving
MAB312	Linear Algebra
MAB314	Probability and Stochastic Modelling 2
Year 3, Semester 2	
ENB242	Introduction To Telecommunications
ENB243	Linear Circuits and Systems
ENB244	Microprocessors and Digital Systems
ENB245	Introduction To Design and Professional Practice
Year 4, Semester 1	
ENB301	Instrumentation and Control
ENB340	Power Systems and Machines
ENB342	Signals, Systems and Transforms
Mathematics Elective (Level 3)	
Year 4, Semester 2	

ENB345	Advanced Design and Professional Practice
MAB414	Applied Statistics 1
Mathematics Elective (Level 3)	
Mathematics Elective (Level 3)	
Year 5, Semester 1	
BEB701	Work Integrated Learning 1
BEB801	Project 1
ENB241	Software Systems Design
OR Electrical Engineering Selective	
ENB346	Digital Communications
Year 5, Semester 2	
BEB802	Project 2
ENB344	Industrial Electronics
Electrical Engineering Selective	
Mathematics Elective (Level 3)	
Electrical Engineering Selectives	
ENB339	Introduction to Robotics
ENB441	Applied Image Processing
ENB448	Signal Processing and Filtering
ENB452	Advanced Power Systems Analysis
ENB453	Power Equipment and Utilisation
ENB456	Energy
ENB457	Controls, Systems and Applications
ENB458	Modern Control Systems

Handbook

Year	2013
QUT code	IF28
CRICOS	027278C
Duration (full-time)	5 years
Campus	Gardens Point
Total credit points	480
Credit points full-time sem.	48 (average)
Start months	August This course is only taught to continuing students only.
Int. Start Months	August This course is only taught to continuing students only.
Course Coordinator	Dr R.Mahalinga-Iyer (Engineering); Director of Undergraduate Studies, QUT Business School; 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 (4, SA). Accountancy, Finance, Economics and Marketing majors also requires 4 SA in Maths A, B or C.

International Subject prerequisites

- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Discontinuation

From Semester 1, 2007, this course has been renamed and recoded to IX28 Bachelor of Business/Bachelor of Engineering. Currently enrolled students who wish to remain in, and graduate from the existing program will be permitted to do so up to the end of 2009. From Semester 1, 2010, all students will be enrolled in the new program.

Handbook

Year	2013
QUT code	IF48
Duration (full-time)	4 years
OP	10
Rank	80
Campus	Gardens Point
Total credit points	432
Credit points full-time sem.	54 (average) for 8 semesters; 48 for 9 semesters
Dom. Start Months	February
Course Coordinator	Richard Thomas (Science and Technology); Dr Claire Gardiner, Director of Undergraduate Studies (QUT Business School)
Discipline Coordinator	Dr Sherrena Buckby (Accountancy); ASPRO Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Anup Basu (Finance); Dr Glen Murphy (Human Resource Management); Mr Michael Cox (International Business); Dr Henri Burgers (Management); Mr Bill Proud (Marketing); and Dr Kim Johnston (Public Relations) Business: Student Services - (07) 3138 2050 Business: Student Services - bus@qut.edu.au

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Discontinuation

Students should note that from Semester 1, 2007 this course has been renamed and recoded to IX33 Bachelor of Business/Bachelor of Information Technology. Therefore, there will be no further intake into this course, however, students who are currently enrolled, or have already been made an offer into this current course for 2007, are able to remain enrolled in it.

For information on the new course, please refer to IX33 Bachelor of Business/Bachelor of Information Technology.

Handbook

Year	2013
QUT code	IF59
CRICOS	006384G
Duration (full-time)	5 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Total credit points	480
Credit points full-time sem.	48
Course Coordinator	Dr R.Mahalinga-Iyer (Engineering), Mr Richard Thomas (Science and Technology)
Discipline Coordinator	Dr Jasmine Banks (Engineering)

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

DISCONTINUATION

As of Semester 1 2009, this course has been discontinued and replaced by IX54 Bachelor of Engineering (Electrical)/Bachelor of Information Technology.

Further Information

For Further information about this course, please contact the following:

Engineering Coordinator

Phone +61 7 3138 8822

Email: sef.enquiry@qut.edu.au

Information Technology Coordinator

Phone +61 7 3138 8822

Email: sef.enquiry@qut.edu.au

Handbook

Year	2013
QUT code	IF86
Duration (full-time)	4 years
OP	13
Rank	72
OP Guarantee	Yes
Campus	Gardens Point and Kelvin Grove
Total credit points	384 (192 cp in the Bachelor of Arts and 192 cp in the Bachelor of Applied Science)
Credit points full-time sem.	48
Course Coordinator	Contact: hhs_enq@qut.edu.au (Arts); sef.enquiry@qut.edu.au; phone 3138 8822 (SEF).
Discipline Coordinator	

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course discontinued

This course has been discontinued and is open to continuing students only.

Course Design

A feature of the course design is the flexibility and choice it offers. Students can tailor the double degree to their career interests by combining any one of the 10 majors that are available in the Bachelor of Applied Science (SC01) degree with a specialisation chosen from a wide range of offerings in the humanities.

The program is integrated so that students will study both science and arts units in each semester.

Professional Recognition

Relevant professional bodies for the Bachelor of Applied Science (SC01) are listed under the separate entry for the course. Eligibility for membership depends on the majors undertaken.

Multidisciplinary Majors

In the Arts component students will be required to complete one multidisciplinary major from the following: International and Global Studies; Community Studies; Society and Change; Ethics and Human Rights; Australian 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](#)

Code	Title
Year 1, Semester 1	
	Major Unit - Arts
	Applied Skills and Scholarship

Two Science units (SC01 Level 1): Foundation units

Year 1, Semester 2

Major Unit - Arts

Discipline Major Unit or Elective unit

Two Science units (SC01 Level 1): at least one Foundation unit

Year 2, Semester 1

Major Unit - Arts

Discipline Major Unit or Elective unit

Two Science units (SC01 Levels 1 and 2: Level 2 from Major)

Year 2, Semester 2

Major Unit - Arts

Minor Unit - Arts

Two Science Units (SC01 Levels 1 and 2: Level 2 from Major)

Year 3, Semester 1

Major Unit - Arts

Discipline Major Unit or Minor Unit or Elective unit - Arts

Two Science Major units (SC01 Level 2)

Year 3, Semester 2

Minor Unit - Arts

Discipline Major Unit or Minor Unit or Elective unit - Arts

Two Science Major units (SC01 Level 3)

Year 4, Semester 1

Major Unit - Arts

Discipline Major Unit or Minor Unit or Elective unit - Arts

Two Science Major units (SC01 Level 3)

Year 4, Semester 2

Major Unit - Arts

Discipline Major Unit or Elective

Two Science Major units (SC01 Level 3)

Handbook

Year	2013
QUT code	IT07
CRICOS	063028M
Duration (full-time)	4 years
OP	12
Rank	75
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4300 per Semester (48 credit points)
International fee (indicative)	2013: \$11,900 per Semester
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)
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.

International Subject prerequisites

- English

You must have achieved study at a level comparable to Australian Year 12 or in recognised post-secondary studies in 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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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.

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

Pathways to Further 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 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.

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](#).

Further Information

For further information about this course, please contact:

Course Coordinator

Dr Taizan Chan or Mr Richard Thomas

Phone: +61 7 3138 8822

Email: sef.enquiry@qut.edu.au

INB320	Business Process Modelling
INB302	IT Capstone Project
IT Specialisation Option	
IT Specialisation Option	

Sample Structure

Semesters

- [IT07 Course Outline](#)
- [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
IT07 Course Outline	
Year 1, Semester 1	
INB120	Corporate Systems
INB122	Organisational Databases
INB101	Impact of IT
INB102	Emerging Technology
Year 1, Semester 2	
INB123	Project Management Practice
BSB115	Management
INB103	Industry Insights
INB104	Building IT Systems
Year 2, Semester 1	
INB220	Business Analysis
BSB126	Marketing
IT Breadth Option	
IT Breadth Option	
Year 2, Semester 2	
INB124	Information Systems Development
MGB223	Entrepreneurship and Innovation
IT Breadth Option	
IT Breadth Option	
Year 3, Semester 1	
INB322	Information Systems Consulting
INB221	Technology Management
INB201	Scalable Systems Development
IT Specialisation Option	
Year 3, Semester 2	
INB300	Professional Practice in IT
INB313	Electronic Commerce Site Development
General Elective	
IT Specialisation Option	
Year 4, Semester 1	
INB312	Enterprise Systems Applications
INB325	Corporate Systems Management Project
INB301	The Business of IT
IT Specialisation Option	
Year 4, Semester 2	

Handbook

Year	2013
QUT code	IT09
CRICOS	063029K
Duration (full-time)	4 years
OP	12
Rank	75
OP Guarantee	Yes
Campus	Gardens Point and Kelvin Grove
Domestic fee (indicative)	2013: CSP \$4300 per Semester (48 credit points)
International fee (indicative)	2013: \$11,900 per Semester
Total credit points	
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 Michael Docherty (Games), Dr Taizan Chan (Corp. Systems)
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)).

International Subject prerequisites

- English

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 A, B or C (4, SA)).

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Career Outcomes

Graduates may find roles as an entrepreneur in the games environment, or in management roles within the games and entertainment industry, for example, project manager, production manager, producer, content manager, business development manager, product manager or marketer.

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Cooperative Education Program

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](#).

Further Information

For further information about this course, please contact:

Corporate Systems Management Course Coordinator

Dr Taizan Chan
Phone: (07)3138 2533
Email: sef.enquiry@qut.edu.au

Games and Interactive Entertainment Course Coordinator

Michael Docherty
Phone: (07) 3138 2515
Email: sef.enquiry@qut.edu.au

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	
INB120	Corporate Systems
INB103	Industry Insights
INB180	Computer Games Studies
INB182	Introducing Design
Year 1, Semester 2	
BSB115	Management
INB104	Building IT Systems
INB123	Project Management Practice
INB181	Introduction to Games Production
Year 2, Semester 1	
INB101	Impact of IT
INB122	Organisational Databases
Games & Interactive Entertainment Major Unit	
Games & Interactive Entertainment Major Unit	
Year 2, Semester 2	
INB124	Information Systems Development
BSB126	Marketing
Games & Interactive Entertainment Major Unit	
Games & Interactive Entertainment Major Unit	
Year 3, Semester 1	
INB220	Business Analysis
INB221	Technology Management

Bachelor of Corporate Systems Management/Bachelor of Games and Interactive Entertainment

Games & Interactive Entertainment Major Unit	
Games & Interactive Entertainment Major Unit	
Year 3, Semester 2	
MGB223	Entrepreneurship and Innovation
INB301	The Business of IT
Games & Interactive Entertainment Major Unit	
Games & Interactive Entertainment Major Unit	
Year 4, Semester 1	
INB379	Game Project Design
INB322	Information Systems Consulting
INB312	Enterprise Systems Applications
INB325	Corporate Systems Management Project
Year 4, Semester 2	
INB380	Games Project
INB320	Business Process Modelling
Games & Interactive Entertainment Major Unit	
INB313	Electronic Commerce Site Development

Handbook

Year	2013
QUT code	IX02
CRICOS	020322E
Duration (full-time)	4 years
OP	13
Rank	73
OP Guarantee	Yes
Campus	Gardens Point and Kelvin Grove
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	432
Credit points full-time sem.	48 (semesters 1, 6-8), 60 (semesters 2-5)
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); Dr Alberto Bellocchi (Secondary). For science enquiries email: sef.enquiry@qut.edu.au. For education enquiries email: educationenq@qut.edu.au or phone 3138 8947
Discipline Coordinator	Dr Perry Hartfield (Biochemistry Major); Dr Marion Bateson (Biotechnology Major); Associate Professor Dennis Arnold (Chemistry Major); Dr Ian Williamson (Ecology Major); Dr Ian Williamson (Environmental Science Major); Dr Craig Sloss (Geoscience Major); Dr Scott McCue (Mathematics Major); Dr Christine Knox (Microbiology Major); Dr Stephen Hughes (Physics Major)

Domestic Entry requirements

Literacy course requirements

All Bachelor of Education students are required to satisfactorily complete assessment criteria relating to Queensland College of Teachers' (QCT) literacy standards by the end of year three of their course in order to meet the course and QCT professional accreditation requirements.

Literacy modules have been developed as a remedial action for students who do not attain satisfactory standards on the relevant literacy criterion during their assessment in the first year of their studies. Students will have the support of the First Year Experience Coordinator. Students may attempt these modules any number of times during the first three years of their program.

At the end of year three, unsatisfactory results within course work and these modules may result in a recommendation for an early exit from the four-year degree. The literacy requirement will also apply to double degree students with a slight variation.

Working with Children Check: blue card

A Blue Card is required as you will be working with children and young people as part of this course. You can apply for a Blue Card through QUT at no cost.

If you do not receive your blue card before the start of a unit that requires contact with children, you may not be able to participate and your grades may be affected. You may also still be liable to pay fees for the unit.

Submit your blue card application to the QUT Student Centre as early as possible, ideally as soon as you have received your offer.

[How to apply for a blue card](#)

Domestic Assumed knowledge

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

- Maths B
- 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

B (4, SA)). Recommended study: At least one of the sciences. For biochemistry, biotechnology and microbiology majors - Biology and Chemistry; for physics major - Maths C.

International Entry requirements

Literacy course requirements

All Bachelor of Education students are required to satisfactorily complete assessment criteria relating to Queensland College of Teachers' (QCT) literacy standards by the end of year three of their course in order to meet the course and QCT professional accreditation requirements.

Literacy modules have been developed as a remedial action for students who do not attain satisfactory standards on the relevant literacy criterion during their assessment in the first year of their studies. Students will have the support of the First Year Experience Coordinator. Students may attempt these modules any number of times during the first three years of their program.

At the end of year three, unsatisfactory results within course work and these modules may result in a recommendation for an early exit from the four-year degree. The literacy requirement will also apply to double degree students with a slight variation.

Working with Children Check: blue card

A Blue Card is required as you will be working with children and young people as part of this course. You can apply for a Blue Card through QUT at no cost.

If you do not receive your blue card before the start of a unit that requires contact with children, you may not be able to participate and your grades may be affected. You may also still be liable to pay fees for the unit.

Submit your blue card application to the QUT Student Centre as early as possible, ideally as soon as you have received your offer.

[How to apply for a blue card](#)

International Subject prerequisites

- Maths B
- English

Bachelor of Applied Science/Bachelor of Education (Secondary)

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: At least one of the sciences. For biochemistry, biotechnology and microbiology majors - Biology and Chemistry; for physics major - Maths C.

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Enrolling

It is imperative that you enrol in both semester 1 and semester 2 units at the start of each year.

Course Overview

This double degree enables you to work as a science professional or pursue a career in scientific research. Alternatively, the Bachelor of Education (Secondary) prepares you to teach in two curriculum areas in secondary school. The science majors that are most relevant if you are intending to follow a career in secondary school teaching are chemistry, ecology, geoscience, mathematics or physics.

Professional Recognition

This course meets the requirements for registration as a teacher in Queensland. It is recognised nationally and internationally, however additional requirements may be needed for some locations.

Graduates will also satisfy the requirements for membership of the relevant professional body for their chosen science major. See [Studyfinder](#) for details on the Bachelor of Applied Science majors.

Other Course Requirements Blue Card

As required by the Commission for Children and Young People and Child Guardian Act (2000), student teachers must undergo a criminal history check and be issued with a Suitability Card (Blue Card) by the Commission. You must hold a Blue Card to undertake activities in any unit which involves contact with children, including the

required field studies blocks, which commence in late January Year 2. The application form is available at student.qut.edu.au/studying/jobs-and-work-experience/work-experience-and-placements/blue-cards.

Literacy

Students must meet the Queensland College of Teachers' literacy standards by the end of Year 3. For more information please visit AskQUT and enter 'Literacy Modules' in the FAQ.

Course Design

See the Bachelor of Applied Science course information for details of major areas of study. To allow you to complete the double degree in a shorter period of time, co-majors are to be taken from the education technology program.

Further Information

For further information about this course, please contact the following:

Science Coordinator

Dr Marion Bateson
Phone: +61 7 3138 1269
Email: m.bateson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Education Coordinator

Dr Alberto Bellocchi
Phone: +61 7 3138 3327
Email: alberto.bellocchi@qut.edu.au

Faculty of Education Office

Phone: +61 7 3138 3948
Fax: +61 7 3138 3949
Email: jo.wakefield@qut.edu.au

Discipline Coordinators

Biochemistry Major

Dr Perry Hartfield
Phone: +61 7 3138 2984
Email: p.hartfield@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Biotechnology Major

Dr Marion Bateson
Phone: +61 7 3138 1269
Email: m.bateson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Chemistry Major

Associate Professor Dennis Arnold
Phone: +61 7 3138 2482
Email: d.arnold@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Ecology Major

Dr Ian Williamson
Phone: +61 7 3138 2779
Email: j.williamson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Environmental Science Major

Dr Ian Williamson
Phone: +61 7 3138 2779
Email: j.williamson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Geoscience Major

Dr Craig Sloss
Phone: +61 7 3138 2610
Email: c.sloss@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Mathematics Major

Dr Scott McCue
Phone: +61 7 3138 4295
Email: s.mccue@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Microbiology Major

Dr Christine Knox
Email: c.knox@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Physics Major

Dr Stephen Hughes
Phone: +61 7 3138 2327
Email: sw.hughes@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Domestic Course structure

See the Bachelor of Applied Science course information for details of major areas of study. To allow you to complete the double degree in a shorter period of time, co-majors are to be taken from the

Bachelor of Applied Science/Bachelor of Education (Secondary)

education technology program.

The Bachelor of Applied Science majors that are relevant to secondary teaching include:

- chemistry
- ecology
- geoscience
- mathematics
- physics.

International Course structure

See the Bachelor of Applied Science course information for details of major areas of study. To allow you to complete the double degree in a shorter period of time, co-majors are to be taken from the education technology program.

The Bachelor of Applied Science majors that are relevant to secondary teaching include:

- chemistry
- ecology
- geoscience
- mathematics
- physics.

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, 6TP4](#)
- [Year 4, Semester 2](#)

Code	Title
Year 1, Semester 1	
	Science Major Unit
	Science Major Unit
	Science Major Unit
	Science Major Unit
Year 1, Semester 2	
	Science Major Unit
	Science Major Unit
	Science Major Unit
	Science Major Unit
	Science Major Unit
Year 2, Semester 1	
EDB002	Teaching and Learning Studies 2: Development and Learning
	Curriculum Studies 1X (See List 1)
EDB031	Secondary Field Studies 1

Please note: The teaching prac component of EDB031 will be organised to commence as soon as schools return for Term 1 in late January/early February. Students will have to be available for four weeks prior to commencement of semester 1. This is to alleviate the problem of students studying 13 week discipline units in the same semester as a teaching prac. Contact the Student Affairs Office on 3138 3948 for further information.

	Science Major Unit
	Science Major Unit
Year 2, Semester 2	
MDB454	Science, Technology and Society
	Science Major Unit
	Science Major Unit
	Science Major Unit
	Science Major Unit
Year 3, Semester 1	
	Curriculum Studies 1Y (See List 1)
	Science Major Unit
	Science Major Unit
	Science Major Unit
	Science Major Unit
Year 3, Semester 2	
EDB003	Teaching and Learning Studies 3: Practising Education
EDB032	Secondary Field Studies 2
	Curriculum Studies 2X (See List 2)
	Curriculum Studies 2Y (See List 2)
Year 4, Semester 1	
EDB004	Teaching and Learning Studies 4: Inclusive Education
EDB033	Secondary Field Studies 3
	Curriculum Studies 3X (See List 3)
	Curriculum Studies 3Y (See List 3)
Year 4, 6TP4	
EDB005	Teaching and Learning Studies 5: Professional Work of Teachers
EDB007	Culture Studies: Indigenous Education
students must enrol in the 6TP4 mode for both EDB005 (internal) and EDB007 (external). The 6TP4 teaching period commences early July, running until mid August.	
EDB005 is delivered through the Stepping Out Conference, which runs over 3 days in 'O' Week of Semester 2 (dates TBA).	
Year 4, Semester 2	
Please note that successful completion of all other coursework is required before students can commence the final Field Studies EDB034 and Internship EDB035.	
EDB034	Secondary Field Studies 4
EDB035	Internship (Secondary)

Handbook

Year	2013
QUT code	IX14
CRICOS	037540M
Duration (full-time)	4 years
OP	13
Rank	73
OP Guarantee	Yes
Campus	Gardens Point and Kelvin Grove
Domestic fee (indicative)	2013: CSP \$3900 per Semester (48 credit points)
International fee (indicative)	2013: \$12,600 per Semester
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 Marion Bateson (Science). For Education contact Student Affairs 07 3138 3947, or educationenq@qut.edu.au. For course progression advice for the Education component contact Nikki Kyle on 07 3138 3212 or nm.kyle@qut.edu.au.
Discipline Coordinator	Education Course Coordinator Dr Lenore Adie. Science Discipline Coordinators: Dr Perry Hartfield (Biochemistry Major); Dr Marion Bateson (Biotechnology Major); Associate Professor Dennis Arnold (Chemistry Major); Dr Ian Williamson (Ecology Major); Dr Ian Williamson (Environmental Science Major); Dr Craig Sloss (Geoscience Major); Dr Scott McCue (Mathematics Major); Dr Christine Knox (Microbiology Major); Dr Stephen Hughes (Physics Major)

Domestic Entry requirements

Literacy course requirements

All Bachelor of Education students are required to satisfactorily complete assessment criteria relating to Queensland College of Teachers' (QCT) literacy standards by the end of year three of their course in order to meet the course and QCT professional accreditation requirements.

Literacy modules have been developed as a remedial action for students who do not attain satisfactory standards on the relevant literacy criterion during their assessment in the first year of their studies. Students will have the support of the First Year Experience Coordinator. Students may attempt these modules any number of times during the first three years of their program.

At the end of year three, unsatisfactory results within course work and these modules may result in a recommendation for an early exit from the four-year degree. The literacy requirement will also apply to double degree students with a slight variation.

Working with Children Check: blue card

A Blue Card is required as you will be working with children and young people as part of this course. You can apply for a Blue Card through QUT at no cost.

If you do not receive your blue card before the start of a unit that requires contact with children, you may not be able to participate and your grades may be affected. You may also still be liable to pay fees for the unit.

Submit your blue card application to the QUT Student Centre as early as possible, ideally as soon as you have received your offer.

[How to apply for a blue card](#)

Domestic Assumed knowledge

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

- Maths B
- 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

B (4, SA)).

International Entry requirements

Literacy course requirements

All Bachelor of Education students are required to satisfactorily complete assessment criteria relating to Queensland College of Teachers' (QCT) literacy standards by the end of year three of their course in order to meet the course and QCT professional accreditation requirements.

Literacy modules have been developed as a remedial action for students who do not attain satisfactory standards on the relevant literacy criterion during their assessment in the first year of their studies. Students will have the support of the First Year Experience Coordinator. Students may attempt these modules any number of times during the first three years of their program.

At the end of year three, unsatisfactory results within course work and these modules may result in a recommendation for an early exit from the four-year degree. The literacy requirement will also apply to double degree students with a slight variation.

Working with Children Check: blue card

A Blue Card is required as you will be working with children and young people as part of this course. You can apply for a Blue Card through QUT at no cost.

If you do not receive your blue card before the start of a unit that requires contact with children, you may not be able to participate and your grades may be affected. You may also still be liable to pay fees for the unit.

Submit your blue card application to the QUT Student Centre as early as possible, ideally as soon as you have received your offer.

[How to apply for a blue card](#)

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Discontinued Course

There is no further intake into this course.

Course Overview

This double degree enables you to work as a science professional or pursue a career in scientific research. Alternatively, the Bachelor of Education (Primary) will prepare you to teach at all levels of primary school. You may also complete a discipline and content studies major in one of the key learning areas of the Queensland school curriculum.

Enrolling

You have 11 years to complete the Bachelor of Applied Science/Bachelor of Education (Primary), including any approved leave of absence. It is imperative that you enrol in both semester 1 and semester 2 units at the start of each year.

Professional Recognition

This course meets the requirements for registration as a teacher in Queensland. It is recognised nationally and internationally, however additional requirements may be needed for some locations.

Graduates will also satisfy the requirements for membership of the relevant professional body for their chosen science major. See [Studyfinder](#) for details on the Bachelor of Applied Science majors.

Working with Children Check

Working With Children Check - As required by the Commission for Children and Young People and Child Guardian Act (2000), student teachers must undergo a criminal history check and be issued with a Suitability Card (Blue Card) by the Commission.

As soon as you enter your enrolment program for the course, you must submit your Blue Card application to the QUT Student Centre immediately. You must hold a Blue Card. to undertake activities

in any unit which involves contact with children, including the required field studies blocks.

If you do not apply for a Blue Card immediately upon enrolment in the course and allow sufficient time for the police check and issuing of the Card, you will be unable to participate in the required activities and may need to be withdrawn from the unit(s) and incur both financial and academic penalty. It may take up to 8 weeks for the Commission to issue the Card. The application form is available at <http://www.student.qut.edu.au/studying/jobs-and-work-experience/work-experience-and-placements/blue-cards>.

Field studies units will be taken in Queensland schools.

Literacy Standards

All students are required to satisfactorily complete assessment criteria relating to Queensland College of Teachers' literacy standards by the end of year 3 of their course in order to meet course and QCT professional accreditation requirements. Literacy modules have been developed as a remedial action for students who do not attain satisfactory standards on the relevant literacy criterion during their assessment in the first year of their studies. Students will have the support of the First Year Experience Coordinator.

Students may attempt these modules any number of times during the first three years of their program. At the end of year 3, unsatisfactory results within course work and these modules may result in a recommendation for an early exit from the four year degree.

Literacy modules can be accessed through Blackboard. Select the Community tab, then enter 'literacy modules' in the community search.

Course Design

Graduates from this double degree will have a science degree with the same core support and choice of major study areas as the graduates from the Bachelor of Applied Science (SC01) program. Education studies will comprise the co-major component. Field Studies units will be taken in Queensland schools.

Designated Units

Field Studies units are designated units. Students who do not successfully complete the requirements of practicum units will have their progress in the course reviewed. Please refer to the unit outlines for more information and/or the Student Services website

Further Information

For further information about this course, please contact the following:

Science Coordinator

Dr Marion Bateson
Phone: +61 7 3138 1269
Email: m.bateson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Faculty of Education

Student Affairs
Phone: +61 7 3138 3947
Email: educationeq@qut.edu.au

Discipline Coordinators

Biochemistry Major

Dr Perry Hartfield
Phone: +61 7 3138 2984
Email: p.hartfield@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Biotechnology Major

Dr Marion Bateson
Phone: +61 7 3138 1269
Email: m.bateson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Chemistry Major

Associate Professor Dennis Arnold
Phone: +61 7 3138 2482
Email: d.arnold@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Ecology Major

Dr Ian Williamson
Phone: +61 7 3138 2779
Email: j.williamson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Environmental Science Major

Dr Ian Williamson
Phone: +61 7 3138 2779
Email: j.williamson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Geoscience Major

Dr Craig Sloss

Bachelor of Applied Science/Bachelor of Education (Primary)

Phone: +61 7 3138 2610
 Email: c.sloss@qut.edu.au
 Alternative phone contact: +61 7 3138 8822
 Alternative email contact: sef.enquiry@qut.edu.au

Geoscience Major

Dr Scott McCue
 Phone: +61 7 3138 4295
 Email: s.mccue@qut.edu.au
 Alternative phone contact: +61 7 3138 8822
 Alternative email contact: sef.enquiry@qut.edu.au

Microbiology Major

Dr Christine Knox
 Email: c.knox@qut.edu.au
 Alternative phone contact: +61 7 3138 8822
 Alternative email contact: sef.enquiry@qut.edu.au

Physics Major

Dr Stephen Hughes
 Phone: +61 7 3138 2327
 Email: sw.hughes@qut.edu.au
 Alternative phone contact: +61 7 3138 8822
 Alternative email contact: sef.enquiry@qut.edu.au

Domestic Course structure

Your course

This double degree gives you a science degree with the same support and choice of major study areas as the Bachelor of Applied Science program.

Available majors include:

- biochemistry
- biotechnology
- chemistry
- ecology
- environmental science
- geoscience
- mathematics
- microbiology
- physics.

International Course structure

Your course

This double degree gives you a science degree with the same support and choice of major study areas as the Bachelor of Applied Science program.

Available majors include:

- biochemistry
- biotechnology
- chemistry
- ecology
- environmental science
- geoscience
- mathematics
- microbiology

- physics.

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, 6TP4 \(early July to mid August\)](#)
- [Year 4, Semester 2](#)

Code	Title
Course Notes	
PLEASE NOTE THAT SOME COURSEWORK UNITS CANNOT BE STUDIED IN THE SAME SEMESTER AS A FIELD STUDIES UNIT. If students do not follow the standard course progression (eg due to a fail grade, or non enrolment in units), time will be added onto the course duration, and you should contact Student Affairs for progression advice, nm.kyle@qut.edu.au.	
All other course requirements must have been successfully completed before commencing EDB024 Primary Field Studies 4: Professional Work of Teachers - Induction into the Field and EDB025 Internship (Primary) in your final semester of study. This is a University and Queensland College of Teachers requirement.	
Overload - The Faculty of Education permits you to overload to 60 credit points (ie standard program plus one more unit) without faculty approval only if your grade point average is 4.0 or higher. If you intend to overload you should seek progression advice from the Course Administration Officer.	
Underload - The Faculty of Education permits you to underload to 36 credit points (ie 3 units in a semester) without faculty approval. If you intend to underload you should seek progression advice from the Course Administration Officer.	
Students must have a valid Bluecard to be eligible for Field Studies units.	
Year 1, Semester 1	
EDB002	Teaching and Learning Studies 2: Development and Learning
Science Major Unit	
Science Major Unit	
Science Major Unit	
Year 1, Semester 2	
EDB021	Primary Field Studies 1: Development and Learning in the Field
Designated Unit: EDB021	
Science Major Unit	
Science Major Unit	
Science Major Unit	
Year 2, Semester 1	
MDB120	Mathematics Curriculum and Pedagogies
Science Major Unit	
Science Major Unit	
Science Major Unit	
Year 2, Semester 2	

CLB008	Teaching Primary SOSE
Science Major Unit	
Science Major Unit	
Science Major Unit	
Year 3, Semester 1	
Science Major Unit	
Science Major Unit	
Science Major Unit	
Science Major Unit	
Year 3, Semester 2	
CLB006	Teaching Reading and Writing
EDB003	Teaching and Learning Studies 3: Practising Education
EDB022	Primary Field Studies 2: Practising Education in the Field
Designated Unit: EDB022	
HMB300	Teaching Primary HPE
Year 4, Semester 1	
EDB004	Teaching and Learning Studies 4: Inclusive Education
EDB023	Primary Field Studies 3: Inclusive Educational Practices
Designated Unit: EDB023	
KKB202	Teaching Primary Dance and Drama
MDB006	Teaching Primary Science
Year 4, 6TP4 (early July to mid August)	
Units offered in the 6TP4 teaching period are subject to their own teaching and census dates refer to http://www.student.qut.edu.au/about/key-dates-and-academic-calendar/key-dates .	
EDB005	Teaching and Learning Studies 5: Professional Work of Teachers
EDB005 is offered via the Stepping Out Conference	
MDB004	Teaching Primary ICT
Year 4, Semester 2	
EDB024	Primary Field Studies 4: Professional Work of Teachers - Induction into the Field
Designated Unit: EDB024	
EDB025	Internship (Primary)
Please note that successful completion of all other coursework is required before students can commence the final Internship unit EDB025.	
Designated Unit: EDB025	

Handbook

Year	2013
QUT code	IX19
CRICOS	078351K
Duration (full-time)	5.5 years
OP	5
Rank	92
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,400 per Semester (48 credit points)
Total credit points	528
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 Ian Williamson (Science); Jennifer Yule (Law)
Discipline Coordinator	Science: +61 7 3138 8822; sef.enquiry@qut.edu.au / Law: +61 7 3138 2707; lawandjustice@qut.edu.au

Domestic Assumed knowledge

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

- Maths B
- English

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 or Maths C.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course Overview

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 Science (ST01) course: biology, chemistry, earth science, environmental science and physics.

Aim

You will graduate with specialised knowledge of cutting-edge technologies 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.

The defining nature of the QUT Law degree is its real-world applied nature which will equip you with the high quality knowledge and skills and that meet the needs of the legal profession, government, business and industry.

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.

Professional membership

Graduates will satisfy the requirements for membership in the relevant professional body for their science major. At the end of your Law degree you will have completed the necessary units for admission to legal practice in Australia.

Non-standard attendance

Field work is a requirement in some areas of science.

Further Information

For further information about this course, please contact the following:

Science Coordinator

Dr Ian Williamson
Phone: +61 7 3138 2779
Email: i.williamson@qut.edu.au

Alternative contact - SEF Student Services

Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Law Coordinator

Jennifer Yule
Phone: +61 7 3138 2707

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](#)
- [Year 5, Semester 1](#)
- [Year 5, Semester 2](#)
- [Year 6, Semester 1](#)

Code	Title
Year 1, Semester 1	

Bachelor of Science/Bachelor of Laws

SEB101	Science in Context
SEB102	Understanding Science
SEB113	Quantitative Methods in Science
SEB114	Experimental Science
Year 1, Semester 2	
LWB145	Legal Foundations A
LWB147	Torts A
Science Major Unit	
Science Major Unit	
Year 2, Semester 1	
LWB146	Legal Foundations B
LWB148	Torts B
Science Major Unit	
Science Major Unit	
Year 2, Semester 2	
LWB136	Contracts A
Law Elective	
Science Major Unit	
Science Major Unit	
Year 3, Semester 1	
LWB137	Contracts B
LWB238	Fundamentals of Criminal Law
Science Major Unit	
Science Major Unit	
Year 3, Semester 2	
LWB239	Criminal Responsibility
Law Elective	
Science Major Unit	
Science Major Unit (Capstone)	
Year 4, Semester 1	
LWB240	Principles of Equity
LWB242	Constitutional Law
LWB243	Property Law A
Law Elective	
Year 4, Semester 2	
LWB241	Trusts
LWB244	Property Law B
Science Core Options	
Science Core Options	
Year 5, Semester 1	
LWB335	Administrative Law
LWB431	Civil Procedure
LWB432	Evidence
Law Elective	
Year 5, Semester 2	
LWB334	Corporate Law
LWB433	Professional Responsibility
Law Elective	
Law Elective	
Year 6, Semester 1	
Law Elective	
Law Elective	
Law Elective	
Law Elective	

Handbook

Year	2013
QUT code	IX23
CRICOS	078352J
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,400 per Semester (48 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 Ian Williamson (Science); Director of Undergraduate Studies, QUT Business School)
Discipline Coordinator	Science and Engineering: sef.enquiry@qut.edu.au; Business: bus@qut.edu.au

Domestic Assumed knowledge

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

- Maths B
- English

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 or Maths C.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 science-based 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.

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	
SEB101	Science in Context
SEB102	Understanding Science
SEB113	Quantitative Methods in Science
SEB114	Experimental Science
Year 1, Semester 2	
Business Unit	
Business Unit	
Science Major Unit	
Science Major Unit	
Year 2, Semester 1	
Business Unit	
Business Unit	
Science Major Unit	
Science Major Unit	
Year 2, Semester 2	
Science Major Unit	
Science Major Unit	
Science Core Options	
Science Core Options	
Year 3, Semester 1	
Business Unit	
Business Unit	
Science Major Unit	
Science Major Unit	
Year 3, Semester 2	
Business Unit	
Business Unit	
Science Major Unit	
Science Major Unit	

Bachelor of Science/Bachelor of Business

Year 4, Semester 1

Business Unit

Business Unit

Business Unit

Business Unit

Year 4, Semester 2

Business Unit

Business Unit

Business Unit

Business Unit

Handbook

Year	2013
QUT code	IX26
Duration (full-time)	4 years
OP	13
Rank	74
OP Guarantee	Yes
Campus	Gardens Point
Total credit points	
Course Coordinator	Dr Marion Bateson (Science), Mr Richard Thomas (Information Systems)
Discipline Coordinator	Dr Perry Hartfield (Biochemistry Major); Dr Marion Bateson (Biotechnology Major); A/Prof Dennis Arnold (Chemistry Major); Dr Ian Williamson (Ecology Major); Dr Ian Williamson (Environmental Science Major); Dr Emad Kiriakous (Forensic Science Major); Dr Craig Sloss (Geoscience Major); Dr Christine Knox (Microbiology Major); Dr Stephen Hughes (Physics Major)

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course discontinued

This course has been discontinued. Currently enrolled students should check with the Course Coordinator for enrolment and unit information.

Handbook

Year	2013
QUT code	IX27
CRICOS	059227E
Duration (full-time)	4 years
OP	8
Rank	86
OP Guarantee	Yes
Campus	Gardens Point and Kelvin Grove
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	Director of Undergraduate Studies (Creative Industries); email: ci@qut.edu.au. Mr Richard Thomas (Science and Technology)
Discipline Coordinator	Prof Clive Bean CI: +61 7 3138 8114 CI: ci@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) 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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course Update

From Semester 1, 2009, a revised version of this double degree program has been introduced. This course has been recoded IX56 Bachelor of Creative Industries/Bachelor of Information Technology. The current IX27 Bachelor of Creative Industries/Bachelor of Information Technology will be offered for continuing students only.

Course Structure

This course is made up of 384 credit points. Each component (i.e. Creative Industries and Information Technology) comprises 192 credit points.

The Creative Industries component is made up of 24 credit points of Faculty Foundation units, 168 credit points from Creative Industries interdisciplinary units.

The Information Technology component is made up of 120 credit points of Faculty core units and 72 credit points of units from an IT major.

Professional Recognition

Graduates of the Bachelor of Information Technology component meet the knowledge requirements for admission to the Australian Computer Society (ACS).

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

Further Information

For further information regarding this course, please contact the following:

Science and Technology Coordinator

Mr Richard Thomas
Phone +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Creative Industries Coordinator

Phone +61 7 3138 8114
Fax +61 7 3138 8116
Email: creativeindustries@qut.edu.au

Handbook

Year	2013
QUT code	IX28
CRICOS	061649J
Duration (full-time)	5 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4600 per Semester (48 credit points)
International fee (indicative)	2013: \$12,200 per Semester
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	Dr R.Mahalinga-Iyer (Engineering); Director of Undergraduate Studies, QUT Business School; email: bus@qut.edu.au
Discipline Coordinator	Dr Jasmine Banks (Engineering); Ms Sherrena Buckby (Accountancy); ASPRO Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Anup Basu (Finance); Dr Glen Murphy (Human Resource Management); Mr Michael Cox (International Business); Dr Henri Burgers (Management); Mr Bill Proud (Marketing); and Dr Kim Johnston (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

- Maths B
- English

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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [Bachelor of Business \(BS05\)](#).

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.

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.

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).

Important Information

QUT Business School rules and procedures are outlined in the [Business Undergraduate Guidelines booklet](#). Other useful information can be found on [Student Services](#) website.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au
QUT Business School: Phone +61 7 3138 2050, Fax +61 7 3138 1055, email: bus@qut.edu.au

Domestic 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.

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.

Handbook

Year	2013
QUT code	IX29
CRICOS	059226F
Duration (full-time)	4 years
OP	12
Rank	76
OP Guarantee	Yes
Campus	Gardens Point
Total credit points	384
Course Coordinator	Dr Tim Moroney (Mathematics Major), Mr Richard Thomas (Information Systems Major)
Discipline Coordinator	

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course Update

From semester one, 2009 this course will not be available for commencing students. IX29 will only be available for continuing students. New students - please refer to IX57. Please contact sef.enquiry@qut.edu.au for any enquiries.

Professional Recognition

On graduation, students will be eligible for membership of the Mathematical Society of Australia, the Statistical Society of Australia Inc and, depending on unit selection, the Australian Society for Operations Research. Graduates of the Bachelor of Information Technology meet the knowledge requirement for admission to the Australian Computer Society.

Course Design

This double degree comprises 384 credit points with 192 credit points from Information Technology and 192 credit points from Mathematics. All majors in the Bachelor of Information Technology are available.

Cooperative Education Program

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. Students wishing to participate in the Cooperative Education Program should be aware that they will not receive financial support as a Dean's Scholar for the duration of the placement.

Find out more about the [Cooperative Education Program](#).

Mathematics Bursaries

Students enrolled in this course can apply for industry-sponsored bursaries. These bursaries are awarded to Australian citizens or permanent residents on a competitive basis. Applications should be

submitted by 1 December of the year preceding entry to the course. For further information see www.maths.qut.edu.au

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.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Handbook

Year	2013
QUT code	IX31
CRICOS	042263G
Duration (full-time)	4 years
OP	11
Rank	78
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4800 per Semester (48 credit points)
International fee (indicative)	2013: \$11,900 per Semester
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 Marion Bateson (Science); Director of Undergraduate Studies, QUT Business School)
Discipline Coordinator	Ms Sherrena Buckby (Accountancy); ASPRO Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Mark Doolan (Finance); Dr Glen Murphy (Human Resource Management); Mr Michael Cox (International Business); Dr Henri Burgers (Management); Mr Bill Proud (Marketing); and Dr Kim Johnston (Public Relations); Science Discipline Coordinator details are listed under further information. Business: +61 7 3138 2050 Business: bus@qut.edu.au

Domestic Assumed knowledge

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

- Maths B
- 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 B (4, SA)). Accountancy, Finance, Economics and Marketing majors require 4 SA in Maths A, B or C.

International Subject prerequisites

- Maths B
- English

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 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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

IMPORTANT NOTE

As of 2013, this course will only be available for continuing Bachelor of Applied Science/Bachelor of Business students and those students who are commencing in 2013 with advanced standing of 96 credit points of 1st year Bachelor of Applied Science units. New students - please refer to Bachelor of Science/Bachelor of Business. Please contact sef.enquiry@qut.edu.au for any enquiries.

Overview

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. 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 science-based career.

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 your intended science major, and the QUT Business School prospectus for more information on business majors, or visit www.qut.edu.au/courses

Important Information for Business Students

QUT Business School rules and procedures are outlined in the [Business Undergraduate Guidelines booklet](#). Other useful information can be found on the [Student Services](#) website.

Further Information

For further information about this course, please contact the following:

Science Coordinator

Dr Marion Bateson
Phone: +61 7 3138 1269
Email: m.bateson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Business Coordinator

Phone: +61 7 3138 2050
Email: bus@qut.edu.au

Science Discipline Coordinators

Biochemistry Major

Dr Perry Hartfield
Phone: +61 7 3138 2984
Email: p.hartfield@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Biotechnology Major

Dr Marion Bateson
Phone: +61 7 3138 1269
Email: m.bateson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Bachelor of Applied Science/Bachelor of Business

Chemistry Major

Associate Professor Dennis Arnold
Phone: +61 7 3138 2482
Email: d.arnold@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Ecology Major

Dr Ian Williamson
Phone: +61 7 3138 2779
Email: j.williamson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Environmental Science Major

Dr Ian Williamson
Phone: +61 7 3138 2779
Email: j.williamson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Forensic Science Major

Dr Emad Kiriakous
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Geoscience Major

Dr Craig Sloss
Phone: +61 7 3138 2610
Email: c.sloss@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Microbiology Major

Dr Christine Knox
Email: c.knox@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Physics Major

Dr Stephen Hughes
Phone: +61 7 3138 2327
Email: sw.hughes@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

• [Year 4 Semester 2](#)

Code	Title
Year 1 Semester 1	
Business Unit	
Business Unit	
Science Faculty Unit	
Science Faculty Unit	
Year 1 Semester 2	
Business Unit	
Business Unit	
Science Faculty Unit	
Science Faculty Unit	
Year 2 Semester 1	
Business Unit	
Business Unit	
Science Faculty Unit	
Science Faculty Unit	
Year 2 Semester 2	
Business Unit	
Business Unit	
Science Faculty Unit	
Science Faculty Unit	
Year 3 Semester 1	
Business Unit	
Business Unit	
Science Faculty Unit	
Science Faculty Unit	
Year 3 Semester 2	
Business Unit	
Business Unit	
Science Faculty Unit	
Science Faculty Unit	
Year 4 Semester 1	
Business Unit	
Business Unit	
Science Faculty Unit	
Science Faculty Unit	
Year 4 Semester 2	
Business Unit	
Business Unit	
Science Faculty Unit	
Science Faculty Unit	

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](#)

Handbook

Year	2013
QUT code	IX37
CRICOS	059601K
Duration (full-time)	4 years
OP	7
Rank	87
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4600 per Semester (48 credit points)
International fee (indicative)	2013: \$11,700 per Semester
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 Undergraduate Studies, QUT Business School; email: bus@qut.edu.au; Dr Tim Moroney(Mathematics)
Discipline Coordinator	Ms Sherrena Buckby (Accountancy); ASPRO Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Mark Doolan (Finance); Dr Glen Murphy (Human Resource Management); Mr Michael Cox (International Business); Dr Henri Burgers (Management); Mr Bill Proud (Marketing); and Dr Kim Johnston (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

- Maths B
- 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 B (4, SA)). Accountancy, Finance, Economics and Marketing majors also require 4 SA in Maths A, B or C.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [Business Undergraduate Guidelines](#).

Other useful information can be found on the [Student Services](#) website.

Further Information

For further information about this course, please contact the following:

Business Coordinator

Phone: Student Services +61 7 3138 2117

Email: Student Services bus@qut.edu.au

Mathematical Sciences Coordinator

Dr Tim Moroney

Phone: +61 7 3138 8822

Email: sef.enquiry@qut.edu.au

Domestic 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:

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.

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:

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.

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 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 Core Unit
	Business School Core Unit
	Mathematics Unit
	Mathematics Unit
Year 2 Semester 2	
	Business School Core Unit
	Business School Major Unit
	Mathematics Unit
	Mathematics Unit
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

Handbook

Year	2013
QUT code	IX49
Duration (full-time)	4 years
OP	13
Rank	73
OP Guarantee	Yes
Campus	Gardens Point and Kelvin Grove
Total credit points	
Course Coordinator	Arts - Contact Nikki Kilkeary on nikki.kilkeary@qut.edu.au - Richard Thomas (Information Technology)
Discipline Coordinator	

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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	
INB103	Industry Insights
INB250	Foundations of Computer Science
Major unit	
Applied Skills And Scholarship	
YEAR 1 SEMESTER 2	
INB210	Databases
INB251	Networks
Major unit	
Discipline unit or Elective unit	
YEAR 2 SEMESTER 1	
INB104	Building IT Systems
Choose one unit from: Intermediate Level Elective list. This choice will replace ITB008 from 2009 course summary.	
Major unit	
Discipline or Minor unit or Elective unit	
YEAR 2 SEMESTER 2	
INB270	Programming
INB271	The Web
Major unit	
Major unit	
YEAR 3 SEMESTER 1	
IT Major Unit	
IT Major Unit	
Major unit	
Discipline or Minor unit or Elective	
YEAR 3 SEMESTER 2	
INB301	The Business of IT
IT Major Unit	
Major unit	
Discipline or Minor unit or Elective	
YEAR 4 SEMESTER 1	
INB302	IT Capstone Project

IT Major Unit
Elective unit
Discipline or Minor unit or Elective
YEAR 4 SEMESTER 2
IT Major Unit
IT Major Unit
Elective unit
Discipline unit or Elective unit

Handbook

Year	2013
QUT code	IX53
CRICOS	066292D
Duration (full-time)	5.5 years
OP	5
Rank	92
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4600 per Semester (48 credit points)
International fee (indicative)	2013: \$11,500 per Semester
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	Mr Mike Roggenkamp (Information Technology), Amanda Stickley (Law Curriculum) and Jen Yule (Law Students)
Discipline Coordinator	Jennifer Yule Law: +61 7 3138 2707 lawandjustice@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)).

International Subject prerequisites

- English

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 A, B or C (4,SA)).

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 e-democracy both in e-government service delivery and political campaigning.

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord. At the end of your Law degree you will have completed the necessary units for admission to legal practice in Australia. To become a practicing lawyer you will need to complete further practical legal training (e.g. Graduate Diploma in Legal Practice) and then apply for admission.

Study Areas

IX53 will not have nominated majors and minors in the IT component and consequently there will not be a Study Area A shown on a graduate's parchment. Instead, IX53 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

Pathways to Further 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 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.

Law School Electives Information

Students who are enrolled in LW34 (straight law undergraduate entry) are required to undertake two contextual electives in the first year of their degree (one in each semester). Contextual electives may also be undertaken by any student as an ordinary elective within their degree. The contextual electives are:

- LWB142 Law Society and Justice
- LWB144 Law and Global Perspectives
- LWB149 Indigenous Legal Issues
- LWB150 Lawyering and Dispute

Bachelor of Information Technology/Bachelor of Laws

Resolution.

Students who are enrolled in any of the law double degrees commence their law electives in the second semester of their second year.

Students who are enrolled in LW35 (Graduate Entry) commence their law electives in first semester of their second year.

Law students other than Graduate Entry students can undertake 4 non-law units as electives within their law degree. Students may be particularly interested in elective options within the School of Justice which relate to human rights and criminal justice.

Graduate Destination Streams

The Faculty of Law has identified graduate destination streams for students undertaking a law or law double degree. This means that, as students learn more throughout their degree, they can choose their elective units in the areas of law in which they become interested. Students are not restricted to choose electives from a single stream; the streams are only to provide guidance to students in making their elective choices.

- Legal Practice
- General Legal Practice (work as a lawyer across a wide range of different legal areas)
- Specialist Legal Practice (work as a lawyer specialising in a particular area of the law, such as property law, family law or corporate law)
- Advocacy and Dispute Resolution (acting for clients in court or resolving disputes through negotiation and mediation processes)
- Public Sector (work as a lawyer in a government department)
- Private Enterprise (for those students not wanting to practise as a lawyer, but perhaps work within business management, human resources, information technology etc)

As students progress towards the end of their degrees there are more opportunities to participate in subjects where they engage in 'real world learning', for example, working within law firms and government departments in placement electives.

Further Information

For further information about this course, please contact the following:

Information Technology Coordinator
Mr Mike Roggenkamp

Phone: +61 07 3138 8822
Email: sef.enquiry@qut.edu.au

Law Coordinator

Jennifer Yule
Ph: +61 7 3138 2707
Fax: +61 7 3138 2222
Email: lawandjustice@qut.edu.au

Domestic Course structure

Course structure
You will study a combination of information technology and law units in the first four years, with law units only in the final year. You will also have the opportunity to choose elective units relevant to your career interests.

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

International Course structure

Course structure
You will study a combination of information technology and law units in the first four years, with law units only in the final year. You will also have the opportunity to choose elective units relevant to your career interests.

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.

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](#)
- [Year 5, Semester 1](#)
- [Year 5, Semester 2](#)
- [Year 6, Semester 1](#)

Code	Title
Year 1, Semester 1	

INB101	Impact of IT
INB102	Emerging Technology
LWB145	Legal Foundations A
LWB147	Torts A
Year 1, Semester 2	
INB103	Industry Insights
INB104	Building IT Systems
LWB146	Legal Foundations B
LWB148	Torts B
Year 2, Semester 1	
IT Breadth Option	
IT Breadth Option	
LWB136	Contracts A
LWB238	Fundamentals of Criminal Law
Year 2, Semester 2	
IT Breadth Option	
IT Breadth Option	
LWB137	Contracts B
LWB239	Criminal Responsibility
Year 3, Semester 1	
INB201	Scalable Systems Development
IT Specialist Option	
LWB240	Principles of Equity
LWB243	Property Law A
Year 3, Semester 2	
INB300	Professional Practice in IT
IT Specialist Option	
LWB241	Trusts
LWB244	Property Law B
Year 4, Semester 1	
INB301	The Business of IT
IT Specialist Option	
LWB242	Constitutional Law
LWB432	Evidence
Year 4, Semester 2	
INB302	IT Capstone Project
IT Specialist Option	
LWB334	Corporate Law
Law Elective	
Year 5, Semester 1	
LWB335	Administrative Law
LWB431	Civil Procedure
Law Elective	
Law Elective	
Year 5, Semester 2	
LWB433	Professional Responsibility
Law Elective	
Law Elective	
Law Elective	
Year 6, Semester 1	
Law Elective	
Law Elective	
Law Elective	
Law Elective	

Handbook

Year	2013
QUT code	IX54
CRICOS	006384G
Duration (full-time)	5 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,700 per Semester
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 R.Mahalinga-Iyer (Engineering), Mr Mike Roggenkamp (Information Technology)
Discipline Coordinator	Dr Jasmine Banks (Engineering), Mr Richard Thomas (Information Technology Major)

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

- Maths B
- 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 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
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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. 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, 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 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.

Bachelor of Engineering (Electrical)/Bachelor of Information Technology

Further Information

For further information about this course, please contact the following:

Engineering Coordinator

Phone +61 7 3138 8822

Email: sef.enquiry@qut.edu.au

Information Technology Coordinator

Phone +61 7 3138 8822

Email: sef.enquiry@qut.edu.au

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](#)
- [Year 5, Semester 1](#)
- [Year 5, Semester 2](#)
- [Electrical Engineering Selectives](#)

Code	Title
Year 1, Semester 1	
ENB100	Engineering and Sustainability
OR	
INB103	Industry Insights
INB104	Building IT Systems
INB101	Impact of IT
MAB125	Foundations of Engineering Mathematics
OR	
MAB126	Mathematics for Engineering 1
Year 1, Semester 2	
ENB120	Electrical Energy and Measurements
ENB200	Introducing Engineering Systems
INB102	Emerging Technology
MAB126	Mathematics for Engineering 1
OR	
MAB127	Mathematics for Engineering 2
Year 2, Semester 1	
ENB240	Introduction To Electronics
ENB130	Mechanical and Thermal Energy
ENB250	Electrical Circuits
MAB127	Mathematics for Engineering 2
OR	
MAB233	Engineering Mathematics 3
Year 2, Semester 2	
ENB150	Introducing Engineering Design
ENB242	Introduction To Telecommunications
ENB243	Linear Circuits and Systems
IT Breadth Option Unit	
Year 3, Semester 1	
ENB110	Engineering Statics and Materials
ENB340	Power Systems and Machines

IT Breadth Option Unit	
IT Breadth Option Unit	
Year 3, Semester 2	
ENB244	Microprocessors and Digital Systems
ENB245	Introduction To Design and Professional Practice
ENB343	Fields, Transmission and Propagation
IT Breadth Option Unit	
Year 4, Semester 1	
ENB301	Instrumentation and Control
INB301	The Business of IT
ENB342	Signals, Systems and Transforms
INB201	Scalable Systems Development
Year 4, Semester 2	
ENB344	Industrial Electronics
ENB345	Advanced Design and Professional Practice
MAB233	Engineering Mathematics 3
OR	
Electrical Engineering Selective	
IT Specialist Option Unit	
Year 5, Semester 1	
ENB346	Digital Communications
OR	
ENB350	Real-time Computer-based Systems
BEB801	Project 1
OR	
INB309-1	Major Project
IT Specialist Option Unit	
IT Specialist Option Unit	
Year 5, Semester 2	
BEB701	Work Integrated Learning 1
BEB802	Project 2
OR	
INB309-2	Major Project
IT Specialist Option Unit	
Electrical Engineering Selective	
Electrical Engineering Selectives	
ENB339	Introduction to Robotics
ENB441	Applied Image Processing
ENB448	Signal Processing and Filtering
ENB452	Advanced Power Systems Analysis
ENB453	Power Equipment and Utilisation
ENB456	Energy
ENB457	Controls, Systems and Applications
ENB458	Modern Control Systems

Handbook

Year	2013
QUT code	IX55
CRICOS	020327M
Duration (full-time)	4 years
OP	13
Rank	73
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,800 per Semester
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 Marion Bateson (Science), Mr Mike Roggenkamp (Information Technology)
Discipline Coordinator	Dr Perry Hartfield (Biochemistry Major); Dr Marion Bateson (Biotechnology Major); Associate Professor Dennis Arnold (Chemistry Major); Dr Ian Williamson (Ecology Major); Dr Ian Williamson (Environmental Science Major); Dr Emad Kirjakous (Forensic Science Major); Dr Craig Sloss (Geoscience Major); Dr Christine Knox (Microbiology Major); Dr Stephen Hughes (Physics Major)

Domestic Assumed knowledge

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

- Maths B
- 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 B (4,SA)). Recommended study: At least one of Chemistry, Physics, Biology, Earth Science, or Maths C.

International Subject prerequisites

- English

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 A, B or C (4,SA)). Recommended study: At least one of the sciences. For biochemistry, biotechnology, forensic science, and microbiology majors - Biological Science and Chemistry; for physics major - Maths C.

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 applied science.

The science component of the course offers you the choice of majoring in biochemistry, biotechnology, chemistry, ecology, environmental science, forensic science, geosciences, microbiology or physics. Theoretical aspects are balanced by strong practical components in this

science and information technology double degree.

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord. Please refer to the Science pages at [Studyfinder](#) for more information on the relevant professional body for your chosen science major.

Study Areas

IX55 will not have nominated majors and minors and consequently there will not be a Study Area A shown on a graduate's parchment. Instead, IX55 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

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 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 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.

Cooperative Education

The Faculty's Cooperative Education Program gives you the opportunity of 10-

Bachelor of Applied Science/Bachelor of Information Technology

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](#).

Further Information

For further information about this course, please contact the following:

Science Coordinator

Dr Marion Bateson
Phone: +61 7 3138 1269
Email: m.bateson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Information Technology Coordinator

Mr Richard Thomas
Phone +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Discipline Coordinators

Biochemistry Major

Dr Perry Hartfield
Phone: +61 7 3138 2984
Email: p.hartfield@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Biotechnology Major

Dr Marion Bateson
Phone: +61 7 3138 1269
Email: m.bateson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Chemistry Major

Associate Professor Dennis Arnold
Phone: +61 7 3138 2482
Email: d.arnold@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Ecology Major

Dr Ian Williamson
Phone: +61 7 3138 2779

Email: j.williamson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Environmental Science Major

Dr Ian Williamson
Phone: +61 7 3138 2779
Email: j.williamson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Forensic Science Major

Dr Emad Kiriakous
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Geoscience Major

Dr Craig Sloss
Phone: +61 7 3138 2610
Email: c.sloss@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Microbiology Major

Dr Christine Knox
Email: c.knox@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Physics Major

Dr Stephen Hughes
Phone: +61 7 3138 2327
Email: sw.hughes@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Domestic 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.

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.

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	
INB101	Impact of IT
INB102	Emerging Technology
Science Core Unit	
Science Core Unit	
Year 1, Semester 2	
INB103	Industry Insights
INB104	Building IT Systems
Science Core Unit	
Science Core Unit	
Year 2, Semester 1	
IT Breadth Unit Option	
IT Breadth Unit Option	
Science Core Unit	
Science Core Unit	
Year 2, Semester 2	
IT Breadth Unit Option	
IT Breadth Unit Option	
Science Core Unit	
Science Core Unit	
Year 3, Semester 1	
INB201	Scalable Systems Development
IT Specialisation Unit Option	
Science Major Unit	
Science Major Unit	
Year 3, Semester 2	
INB300	Professional Practice in IT
IT Specialisation Unit Option	
Science Major Unit	
Science Major Unit	
Year 4, Semester 1	
INB301	The Business of IT
IT Specialisation Unit Option	
Science Major Unit	
Science Major Unit	
Year 4, Semester 2	
INB302	IT Capstone Project
IT Specialisation Unit Option	
Science Major Unit	
Science Major Unit	

Handbook

Year	2013
QUT code	IX56
CRICOS	059227E
Duration (full-time)	4 years
OP	10
Rank	80
OP Guarantee	Yes
Campus	Gardens Point and Kelvin Grove
Domestic fee (indicative)	2013: CSP \$3900 per Semester (48 credit points)
International fee (indicative)	2013: \$11,700 per Semester
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 Undergraduate Studies(Creative Industries); email: ci@qut.edu.au. Mr Mike Roggenkamp (Information Technology)
Discipline Coordinator	Prof Clive Bean CI: 07 3138 8114 ci@qut.edu.au (Creative Industries)

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)).

International Subject prerequisites

- English

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 A, B or C (4,SA)).

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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
- 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 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 Societies
- 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

Bachelor of Creative Industries/Bachelor of Information Technology

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 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.

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](#).

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.

Further Information

For Further information about this course please contact the following:

Information Technology Coordinator

Mr Mike Roggenkamp
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Creative Industries Coordinator

Phone +61 7 3138 8114
Fax +61 7 3138 8116
Email: creativeindustries@qut.edu.au

Domestic Course structure

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 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 Societies
- Enterprise Systems
- Information Management
- Network Systems
- Software Engineering
- Web Technologies

International Course structure

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 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 Societies
- Enterprise Systems
- Information Management
- Network Systems
- Software Engineering
- Web Technologies

Sample Structure

A number of changes have been made to Creative Industries courses. Units have been recoded, renamed or discontinued. To see how these changes affect you, it is recommended that you consult one of the tables below in conjunction with your course outline.

[Changes to Creative Industries Units](#)
[Discontinued Creative Industries Units](#)

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	
INB101	Impact of IT
INB102	Emerging Technology
KKB101	Creative Industries: People and Practices
Creative Industries Major: First Unit	
Year 1, Semester 2	
INB103	Industry Insights
INB104	Building IT Systems
KKB102	Creative Industries: Making Connections
Creative Industries Major: Second Unit	
Year 2, Semester 1	
IT Breadth Option Unit	
IT Breadth Option Unit	
A unit from the Level 1 Unit Options (either KIB101 or KPB101 or KVB104):	
KIB101	Visual Communication
KPB101	Introduction to Film, TV and New Media Production
KVB104	Photomedia and Artistic Practice
Creative Industries Major: Third Unit	
Year 2, Semester 2	
IT Breadth Option Unit	
IT Breadth Option Unit	
A unit from the Level 2 Unit Options (either KTB211 or KXB202):	
KTB211	Creative Industries Events and Festivals
KXB202	Project Management for Entertainment
Creative Industries Major: Fourth Unit	
Year 3, Semester 1	
INB201	Scalable Systems Development
IT Specialisation Option Unit	
Creative Industries Major: Fifth Unit	
A unit from the Creative Industries University Wide or Creative Industries Faculty Only Unit Options lists	
Year 3, Semester 2	
INB300	Professional Practice in IT
IT Specialisation Option Unit	
Creative Industries Major: Sixth Unit	
A unit from the Creative Industries University Wide or Creative Industries Faculty Only Unit Options lists	
Year 4, Semester 1	
INB301	The Business of IT
IT Specialisation Option Unit	
Creative Industries Major: Seventh Unit	
A unit from the Transitions to New Professional Environments Unit Options	
Year 4, Semester 2	
INB302	IT Capstone Project
IT Specialisation Option Unit	
Creative Industries Major: Eighth Unit	
A unit from the Transitions to New Professional Environments Unit Options	

Handbook

Year	2013
QUT code	IX57
CRICOS	059226F
Duration (full-time)	4 years
OP	7
Rank	87
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
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	Mr Mike Roggenkamp (Information Technology), Dr Tim Moroney (Mathematics)
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- 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 B (4,SA).

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 Societies
- 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 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.

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](#).

Further Information

For further information about this course, please contact the following:

Information Technology

Coordinator

Mr Mike Roggenkamp
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Mathematical Sciences

Coordinator

Dr Tim Moroney
Phone: +61 7 3138 2262
Email: t.moroney@qut.edu.au

Domestic 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.

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.

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	
INB101	Impact of IT
INB102	Emerging Technology
MAB121	Single Variable Calculus and Differential Equations
MAB122	Linear Algebra and Multivariable Calculus
Year 1, Semester 2	
INB103	Industry Insights
INB104	Building IT Systems
MAB210	Probability and Stochastic Modelling 1
MAB220	Computational Mathematics 1

Year 2, Semester 1	
IT Breadth Unit Option	
IT Breadth Unit Option	
MAB312	Linear Algebra
Level 2 or 3 Maths Unit	
Year 2, Semester 2	
IT Breadth Unit Option	
IT Breadth Unit Option	
Level 2 or 3 Maths Unit	
Level 2 or 3 Maths Unit	
Year 3, Semester 1	
INB201	Scalable Systems Development
IT Specialisation Unit Option	
MAB311	Advanced Calculus
Level 2 or 3 Maths Unit	
Year 3, Semester 2	
INB300	Professional Practice in IT
IT Specialisation Unit Option	
Level 2 or 3 Maths Unit	
Level 2 or 3 Maths Unit	
Year 4, Semester 1	
INB301	The Business of IT
IT Specialisation Unit Option	
Level 2 or 3 Maths Unit	
Level 2 or 3 Maths Unit	
Year 4, Semester 2	
INB302	IT Capstone Project
IT Specialisation Unit Option	
Level 2 or 3 Maths Unit	
Level 2 or 3 Maths Unit	

Handbook

Year	2013
QUT code	IX58
CRICOS	059595C
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4600 per Semester (48 credit points)
International fee (indicative)	2013: \$12,700 per Semester
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), Director of Undergraduate Studies, QUT Business School; email: bus@qut.edu.au
Discipline Coordinator	Ms Sherrena Buckby (Accountancy); ASPRO Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Mark Doolan (Finance); Dr Glen Murphy (Human Resource Management); Mr Michael Cox (International Business); Dr Henri Burgers (Management); Mr Bill Proud (Marketing); and Dr Kim Johnston (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)).

International Subject prerequisites

- English

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 A, B or C (4,SA)).

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 Technology. 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 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 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.

Business: For BS63 Bachelor of Business (Honours) please click [BS63](#) 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 [Cooperative Education Program](#).

Important Information for Business Students

QUT Business School rules and procedures are outlined in the [Business Undergraduate Guidelines booklet](#). Other useful information can be found on the [Student Services](#) website.

Domestic 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

The following Majors are available from the Business component: Accounting, Advertising, Economics, Finance, Human Resource Management, International Business, Management, Marketing and Public Relations.

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

The following Majors are available from the Business component: Accounting, Advertising, Economics, Finance, Human Resource Management, International Business, Management, Marketing and Public Relations.

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	
INB101	Impact of IT
INB102	Emerging Technology
Business Unit	
Business Unit	
Year 1, Semester 2	
INB103	Industry Insights
INB104	Building IT Systems
Business Unit	
Business Unit	
Year 2, Semester 1	
IT Breadth Option Unit	
IT Breadth Option Unit	
Business Unit	
Business Unit	
Year 2, Semester 2	
IT Breadth Option Unit	
IT Breadth Option Unit	
Business Unit	
Business Unit	
Year 3, Semester 1	
INB201	Scalable Systems Development
INB201 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	
INB300	Professional Practice in IT
INB300 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	
INB301	The Business of IT
INB300 and INB301 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	
INB302	IT Capstone Project
INB301 must be completed before enrolling in INB302.	
IT Specialist Option Unit	
Business Unit	
Business Unit	

Handbook

Year	2013
QUT code	IX61
CRICOS	063030F
Duration (full-time)	4 years
OP	11
Rank	77
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$3700 per Semester (48 credit points)
International fee (indicative)	2013: \$11,700 per Semester
Total credit points	
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 (Science and Engineering), Prof Kerry Carrington (Law)
Discipline Coordinator	Professor Kerry Carrington (Justice); Dr Taizan Chan (Science and Technology) Justice: +61 7 3138 2707; (07) 3138 2782 lawandjustice@qut.edu.au; t.chan@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); Maths A, B or C (4,SA)).

International Subject prerequisites

- English

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies (English (4,SA); Maths A, B or C (4,SA)).

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course Overview

There is an ever-increasing number of criminal acts resulting from the development and use of technology (such as the Internet and mobile devices), therefore, students with a corporate systems management background have the appropriate skills and knowledge required to work on criminology and policing for these areas. Corporate systems management students also gain information systems knowledge which allows them to more effectively manage, secure and control systems and processing in justice departments.

Corporate systems management teaches students how to analyse business needs and devise IT-enabled business systems that deliver the necessary information to the key people via the most appropriate technologies. The justice component comprises a primary major study area in either criminology or policing, which covers skills in criminology, policing, ethics, crime prevention, justice policy and investigations.

Career Outcomes

Graduates find work in justice areas including corrective services, police, Crime and Misconduct Commission, Department of Justice and Attorney-General, Federal and Family Courts and the Australian Taxation Office.

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Cooperative Education Program

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](#).

Futher Information

For further information about this course, please contact the following:

Science and Engineering Coordinator

Dr Taizan Chan
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Law Coordinator

Professor Kerry Carrington
Phone: +61 7 3138 7112
Email: lawjs_enquiry@qut.edu.au

Domestic Course structure

This course consists of 16 corporate systems management units and 16 justice units with both areas studied in each semester.

The justice component comprises a primary major study area in Policy and Governance or Criminology and Policing (subject to final approval) which covers skills in criminology, policing, ethics, crime prevention, justice policy

Bachelor of Corporate Systems Management/Bachelor of Justice

and investigations.

You will also study a range of professional skills as a foundation for your career.

International Course structure

Course structure

This course consists of 16 corporate systems management units and 16 justice units with both areas studied in each semester.

The justice component comprises a primary major study area in Policy and Governance or Criminology and Policing (subject to final approval) which covers skills in criminology, policing, ethics, crime prevention, justice policy and investigations.

You will also study a range of professional skills as a foundation for your career.

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](#)
- [Criminology and Policing Major Units](#)
- [Policy and Governance Major Units](#)

Code	Title
Year 1, Semester 1	
INB120	Corporate Systems
INB103	Industry Insights
JSB170	Introduction to Criminology and Policing
JSB171	Justice and Society
Year 1, Semester 2	
BSB115	Management
INB123	Project Management Practice
JSB173	Understanding the Criminal Justice System
JSB174	Forensic Psychology and the Law
Year 2, Semester 1	
INB101	Impact of IT
INB122	Organisational Databases
JSB172	Professional Criminological Research Skills
JSB175	Social Ethics and the Justice System
Year 2, Semester 2	
INB124	Information Systems Development
INB313	Electronic Commerce Site Development
Policy Governance and Justice	

Justice Study Area A Unit from list below (Criminology and Policing or Policy and Governance)	
Year 3, Semester 1	
INB220	Business Analysis
INB221	Technology Management
Justice Study Area A Unit from list below (Criminology and Policing or Policy and Governance)	
Justice Study Area A Unit from list below (Criminology and Policing or Policy and Governance)	
Year 3, Semester 2	
INB320	Business Process Modelling
MGB223	Entrepreneurship and Innovation
Justice Study Area A Unit from list below (Criminology and Policing or Policy and Governance)	
Justice Study Area A Unit from list below (Criminology and Policing or Policy and Governance)	
Year 4, Semester 1	
INB312	Enterprise Systems Applications
INB322	Information Systems Consulting
JSB381	Indigenous Justice in Criminal Justice
Justice Study Area A Unit from list below (Criminology and Policing or Policy and Governance)	
Year 4, Semester 2	
BSB126	Marketing
INB325	Corporate Systems Management Project
Justice Study Area A Unit from list below (Criminology and Policing or Policy and Governance)	
Justice Study Area A Unit from list below (Criminology and Policing or Policy and Governance)	
Criminology and Policing Major Units	
Complete 4 core units:	
JSB207	Punishment and Penal Policy
JSB272	Theories of Crime
JSB273	Crime Research Methods
JSB284	Policing in Context
Select 4 units from the below	
JSB157	Policing Diversity
JSB176	Criminal Law in Context
Crimes of Violence	
JSB183	White Collar Crime
JSB184	Sex and Crimes
JSB374	Crime Prevention
JSB208	Gender Crime and the Criminal Justice System
JSB255	Eco Crime
Statistical Methods	
JSB285	Political Violence and Terrorism
JSB278	Drugs and Crime
JSB209	Transnational Organised Crime and Terrorism
JSB276	Independent Study
JSB277	Independent Study
JSB372	Youth Justice
Professional Placement	

Death Investigation	
Information Management and Analysis	
Intelligence and Security	
Policy and Governance Major Units	
Complete 8 core units:	
JSB261	Theories of Government
Gender and Governance	
Justice Institutions	
Statistical Methods	
JSB265	Official Corruption
JSB273	Crime Research Methods
Political Practice	
Critical Policy Analysis	

Handbook

Year	2013
QUT code	IX62
CRICOS	063022F
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4600 per Semester (48 credit points)
International fee (indicative)	2013: \$11,700 per Semester
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); Director of Undergraduate Studies, QUT Business School; email: bus@qut.edu.au
Discipline Coordinator	Ms Sherrena Buckby (Accountancy); ASPRO Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Mark Doolan (Finance); Dr Glen Murphy (Human Resource Management); Mr Michael Cox (International Business); Dr Henri Burgers (Management); Mr Bill Proud (Marketing); and Dr Kim Johnston (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)).

International Subject prerequisites

- English

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies (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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [Cooperative Education Program](#).

Important Information for Business Students

QUT Business School rules and procedures are outlined in the [Business Undergraduate Guidelines booklet](#).

Other useful information can be found on the [Student Services](#) website.

Futher Information

For further information about this course, please contact the following:

Corporate Systems Management Coordinator

Dr Taizan Chan
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Business Coordinator

Phone: +61 7 3138 2050
Fax: +61 7 3138 1055
Email: bus@qut.edu.au

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

Bachelor of Business/Bachelor of Corporate Systems Management

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.

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 Unit	
Business Unit	
INB103	Industry Insights
INB120	Corporate Systems

Year 1, Semester 2	
Business Unit	
Business Unit	
INB123	Project Management Practice
IX62 Complementary Studies unit	
Year 2, Semester 1	
Business Unit	
Business Unit	
INB101	Impact of IT
INB122	Organisational Databases
Year 2, Semester 2	
Business Unit	
Business Unit	
INB124	Information Systems Development
INB313	Electronic Commerce Site Development
Year 3, Semester 1	
Business Unit	
Business Unit	
INB220	Business Analysis
INB221	Technology Management
Year 3, Semester 2	
Business Unit	
Business Unit	
INB320	Business Process Modelling
IX62 Complementary Studies unit	
Year 4, Semester 1	
Business Unit	
Business Unit	
INB312	Enterprise Systems Applications
INB322	Information Systems Consulting
Year 4, Semester 2	
Business Unit	
Business Unit	
MGB223	Entrepreneurship and Innovation
INB325	Corporate Systems Management Project

Handbook

Year	2013
QUT code	IX63
CRICOS	063024D
Duration (full-time)	4 years
OP	9
Rank	82
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4600 per Semester (48 credit points)
International fee (indicative)	2013: \$11,700 per Semester
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	Michael Docherty (Games and Interactive Entertainment); Director of Undergraduate Studies, QUT Business School; email: bus@qut.edu.au
Discipline Coordinator	Ms Sherrena Buckby (Accountancy); ASPRO Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Mark Doolan (Finance); Dr Glen Murphy (Human Resource Management); Mr Michael Cox (International Business); Dr Henri Burgers (Management); Mr Bill Proud (Marketing); and Dr Kim Johnston (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

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)).

International Subject prerequisites

- English

You must have achieved this study at a level comparable to Australian Year 12 or in recognised post-secondary studies (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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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 [Cooperative Education Program](#).

Important Information for Business Students

QUT Business School rules and procedures are outlined in the [Business Undergraduate Guidelines booklet](#). Other useful information can be found on the [Student Services](#) 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.

Further Information

For further information about this course, please contact the following:

Games and Interactive Entertainment

Michael Docherty
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Business Coordinator

Phone: +61 7 3138 2050
Fax: +61 7 3138 1055
Email: bus@qut.edu.au

Domestic 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

Bachelor of Business/Bachelor of Games and Interactive Entertainment

concurrently.

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.

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 Core Unit - See Appendix 1	
Business School Core Unit - See Appendix 1	
INB180	Computer Games Studies
INB182	Introducing Design
Year 1, Semester 2	
Business School Core Unit - See Appendix 1	
Business School Core Unit - See Appendix 1	
INB181	Introduction to Games Production
INB104	Building IT Systems
The ITB002 unit is currently under review; further information will be available in August 2009.	
Year 2, Semester 1	
Business School Core Unit - See Appendix 1	
Business School Core Unit - See Appendix 1	
INB103	Industry Insights
Games & Interactive Entertain Major Unit	
Year 2, Semester 2	
Business School Core Unit - See Appendix	
Business School Core Unit - See Appendix	
Games & Interactive Entertain Major Unit	
Games & Interactive Entertain Major Unit	
Year 3, Semester 1	
Business School Major Unit - See Appendix	
Business School Major Unit - See Appendix	
Games & Interactive Entertain Major Unit	
Games & Interactive Entertain Major Unit	
Year 3, Semester 2	
Business School Major Unit - See Appendix	

Business School Major Unit - See Appendix	
Games & Interactive Entertainment Major Unit	
Games & Interactive Entertain Major Unit	
Year 4, Semester 1	
Business School Major Unit - See Appendix	
Business School Major Unit - See Appendix	
Games & Interactive Entertainment Major Unit	
INB379	Game Project Design
Year 4, Semester 2	
Business School Major Unit - See Appendix	
Business School Major Unit - See Appendix	
INB380	Games Project

Handbook

Year	2013
QUT code	IX64
CRICOS	063031E
Duration (full-time)	4 years
OP	7
Rank	87
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$11,900 per Semester
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	Michael Docherty (Games and Interactive Entertainment); Dr Tim Moroney (Mathematics)
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- 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 B (4,SA).

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course Overview

This double degree gives you the opportunity to use your problem-solving skills to develop realistic games in a competitive gaming environment. A decade ago, people probably wouldn't have noticed if the cape the game hero was wearing didn't flap in the wind as he ran, or that the boxes in the corner of the room of the dungeon didn't fall over when they are run into in a fight. Nowadays, serious gamers notice and demand this type of realism in their virtual worlds. This is where your maths and problem-solving capabilities come into play. Complex formulae are used in games design to create realistic scenes, and knowledge of mathematics will certainly aid your understanding.

Students undertake core units from both their Bachelor of Mathematics and Bachelor of Games and Interactive Entertainment. They can subsequently select from the strands of applied,

computational, discrete and financial mathematics; mathematical modelling; operations research; scientific computation and visualisation; statistics and statistical modelling in their Bachelor of Mathematics and from the majors of animation, digital media, game design or software technologies in their Bachelor of Games and Interactive Entertainment degree.

Career Outcomes

A graduate may find work in film and television special effects or in the games and interactive entertainment environments making games look more realistic (such as concept artist).

Professional Recognition

Membership of the Australian Mathematical Society, the Statistical Society of Australia and the Australian Society for Operations Research is available. This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Cooperative Education Program

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](#).

Further Information

For further information about this course, please contact the following:

Games and Interactive Entertainment Coordinator

Michael Docherty
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Email: sef.enquiry@qut.edu.au

Mathematical Sciences Coordinator

Dr Tim Moroney

Bachelor of Games and Interactive Entertainment/Bachelor of Mathematics

Phone: +61 7 3138 2262
Email: t.moroney@qut.edu.au

Level 2 or 3 Maths Unit

Level 2 or 3 Maths Unit

Financial Support

You should consider applying for an industry-sponsored mathematics bursary to help you financially throughout your studies. For further information visit [Scholarships](#).

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	
INB180	Computer Games Studies
INB182	Introducing Design
MAB121	Single Variable Calculus and Differential Equations
MAB122	Linear Algebra and Multivariable Calculus
Year 1, Semester 2	
INB181	Introduction to Games Production
INB104	Building IT Systems
MAB210	Probability and Stochastic Modelling 1
MAB220	Computational Mathematics 1
Year 2, Semester 1	
INB103	Industry Insights
Games & Interactive Entertain Major Unit	
MAB312	Linear Algebra
Level 2 or 3 Maths Unit	
Year 2, Semester 2	
Games & Interactive Entertain Major Unit	
Games & Interactive Entertain Major Unit	
Level 2 or 3 Maths Unit	
Level 2 or 3 Maths Unit	
Year 3, Semester 1	
Games & Interactive Entertain Major	
Games & Interactive Entertain Major	
MAB311	Advanced Calculus
Level 2 or 3 Maths Unit	
Year 3, Semester 2	
Games & Interactive Entertain Major	
Games & Interactive Entertain Major	
Level 2 or 3 Maths Unit	
Level 2 or 3 Maths Unit	
Year 4, Semester 1	
INB379	Game Project Design
Games & Interactive Entertain Major	
Level 2 or 3 Maths Unit	
Level 2 or 3 Maths Unit	
Year 4, Semester 2	
INB380	Games Project

Handbook

Year	2013
QUT code	IX65
CRICOS	063032D
Duration (full-time)	4 years
OP	13
Rank	73
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,500 per Semester
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 Marion Bateson (Science), Michael Docherty (Information Systems)
Discipline Coordinator	Dr Perry Hartfield (Biochemistry Major); Dr Marion Bateson (Biotechnology Major); Associate Professor Dennis Arnold (Chemistry Major); Dr Ian Williamson (Ecology Major); Dr Ian Williamson (Environmental Science Major); Dr Emad Kirjakous (Forensic Science Major); Dr Craig Sloss (Geoscience Major); Dr Christine Knox (Microbiology Major); Dr Stephen Hughes (Physics Major)

Domestic Assumed knowledge

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

- Maths B
- 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 B (4,SA). Recommended study: At least one of Chemistry, Physics, Biology, Earth Science or Maths C.

International Subject prerequisites

- Maths B
- English

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: At least one of the sciences. For biochemistry, biotechnology, forensic science, and microbiology majors - Biological Science and Chemistry; for physic major - Maths C.

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Career Outcomes

Knowledge of science underpins more than you might think. As a graduate of the Applied Science/Games and Interactive Entertainment double degree you may find work as a graphic/games designer. You may work on such things as making car games realistic, making people move more realistically using your knowledge of the laws of motion, or creating three-dimensional games.

Professional Recognition

Graduates will satisfy the requirements of membership in the relevant professional body for their chosen science major. See [Studyfinder](#) for details on the Bachelor of

Applied Science majors. The software technologies major of the Bachelor of Games and Interactive Entertainment is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

Cooperative Education Program

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](#).

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.

Further Information

For further information about this course, please contact the following:

Games and Interactive Entertainment Coordinator

Michael Docherty
Phone: +61 7 3138 8822
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Science Coordinator

Dr Marion Bateson
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Email: m.bateson@qut.edu.au
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Discipline Coordinators

Biochemistry Major

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Biotechnology Major

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Chemistry Major

Associate Professor Dennis Arnold
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Ecology Major

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Environmental Science Major

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Alternative email contact: sef.enquiry@qut.edu.au

Forensic Science Major

Dr Emad Kiriakous
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Geoscience Major

Dr Craig Sloss
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Microbiology Major

Dr Christine Knox
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Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Physics Major

Dr Stephen Hughes
Phone: +61 7 3138 2327
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Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

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	
	Applied Science Unit
	Applied Science Unit
INB180	Computer Games Studies
INB182	Introducing Design
Year 1, Semester 2	
	Applied Science Unit
	Applied Science Unit
INB181	Introduction to Games Production
INB104	Building IT Systems
Year 2, Semester 1	
	Applied Science Unit
	Applied Science Unit
INB103	Industry Insights
	Games & Interactive Entertainment Major Unit
Year 2, Semester 2	
	Applied Science Unit
	Applied Science Unit
	Games & Interactive Entertainment Major Unit
	Games & Interactive Entertainment Major Unit
Year 3, Semester 1	
	Applied Science Unit
	Applied Science Unit
	Games & Interactive Entertainment Major Unit
	Games & Interactive Entertainment Major Unit
Year 3, Semester 2	
	Applied Science Unit
	Applied Science Unit
	Games & Interactive Entertainment Major Unit
	Games & Interactive Entertainment Major Unit
Year 4, Semester 1	
	Applied Science Unit
	Applied Science Unit
INB379	Game Project Design
	Games & Interactive Entertainment Major Unit
Year 4, Semester 2	
	Applied Science Unit
	Applied Science Unit
INB380	Games Project

Handbook

Year	2013
QUT code	IX69
CRICOS	064812A
Duration (full-time)	4 years
OP	10
Rank	80
OP Guarantee	Yes
Campus	Gardens Point and Kelvin Grove
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$11,900 per Semester
Total credit points	384
Dom. Start Months	February
Deferment	You can defer your offer and postpone the start of your course for one year
Course Coordinator	Head of Studies, MECA (Creative Industries); Mr Mike Roggenkamp (Information Technology)
Discipline Coordinator	Dr Gavin Sade (Interactive and Visual Design) Ct: +61 7 3138 8114 ci@qut.edu.au (Interactive and Visual Design)

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

- English

You must have achieved study of English and one of the following: Maths A, Maths B or Maths C, 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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

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.

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

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 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.

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 achieved the required GPA.

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](#).

Further Information

For Further information about this course, please contact the following:

Information Technology Coordinator

Mr Mike Roggenkamp
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Email: sef.enquiry@qut.edu.au

Creative Industries Coordinator

Phone +61 7 3138 8114
Fax +61 7 3138 8116
Email: creativeindustries@qut.edu.au

Domestic 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 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

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 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

Sample Structure

A number of changes have been made to Creative Industries courses. Units have been recorded, renamed or discontinued. To see how these changes affect you, it is recommended that you consult the tables below in conjunction with your course outline.

[Changes to Creative Industries Units](#)
[Discontinued Creative Industries Units](#)

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	
INB101	Impact of IT
INB102	Emerging Technology
KIB100	Design and Creative Thinking
KIB101	Visual Communication
Year 1, Semester 2	
INB103	Industry Insights
INB104	Building IT Systems
KIB109	Design for Interactive Media
KIB120	Graphic Design
Year 2, Semester 1	
IT Breadth Option Unit	
IT Breadth Option Unit	
KIB103	Introduction to Web Design and Development
KNB112	Drawing for Animation 1
Year 2, Semester 2	
IT Breadth Option Unit	
IT Breadth Option Unit	
KIB102	Visual Interactions
KNB123	Animation and Motion Graphics
Year 3, Semester 1	
INB201	Scalable Systems Development
IT Specialist Option Unit	
KIB204	Web Interface Design
KIB231	Typography and Illustration
Year 3, Semester 2	
INB300	Professional Practice in IT
IT Specialist Option Unit	
KIB207	Theories of Visual Communication
KIB216	Advanced Web Design
Year 4, Semester 1	
INB301	The Business of IT
IT Specialist Option Unit	
KIB315	Contemporary Issues in Digital Media
INTERACTIVE AND VISUAL DESIGN SEMESTER 1 UNIT OPTIONS:	

One unit (12cp) from the Interactive and Visual Design Semester 1 Unit Options (KIB309 or KIB340):

KIB309	Embodied Interactions
KIB340	Visual Information Design

Year 4, Semester 2

INB302	IT Capstone Project
IT Specialist Option Unit	
KIB322	Professional Practice for Designers

INTERACTIVE AND VISUAL DESIGN SEMESTER 2 UNIT OPTIONS:

One unit (12cp) from the Interactive and Visual Design Semester 2 Unit Options (KIB314 or KIB338)

KIB314	Tangible Media
KIB338	Print Media

Handbook

Year	2013
QUT code	IX72
CRICOS	066294B
Duration (full-time)	5.5 years
OP	5
Rank	92
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4600 per Semester (48 credit points)
International fee (indicative)	2013: \$11,900 per Semester
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); Jennifer Yule (Law)
Discipline Coordinator	Dr Perry Hartfield (Biochemistry); Dr Marion Bateson (Biotechnology); Associate Professor Dennis Arnold (Chemistry); 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); Jennifer Yule (Law) Science: +61 7 3138 8822; sef.enquiry@qut.edu.au / Law: +61 7 3138 2707; lawandjustice@qut.edu.au

Domestic Assumed knowledge

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

- Maths B
- 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 B (4, SA)).

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

IMPORTANT NOTE

As of 2013, this course will only be available for continuing Bachelor of Applied Science/Bachelor of Business students and those students who are commencing in 2013 with advanced standing of 96 credit points of 1st year Bachelor of Applied Science units. New students - please refer to Bachelor of Science/Bachelor of Business. Please contact sef.enquiry@qut.edu.au for any enquiries.

Professional Recognition

Graduates will satisfy the requirements for membership in the relevant professional body for their science major. See [Studyfinder](#) 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.

Further Information

For further information about this course, please contact the following:

Science Coordinator

Dr Marion Bateson
Phone: +61 7 3138 1269
Email: m.bateson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Law Coordinator

Jennifer Yule
Phone: +61 7 3138 2707

Discipline Coordinators

Biochemistry Major

Dr Perry Hartfield
Phone: +61 7 3138 2984
Email: p.hartfield@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Biotechnology Major

Dr Marion Bateson
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Email: m.bateson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Chemistry Major

Associate Professor Dennis Arnold
Phone: +61 7 3138 2482
Email: d.arnold@qut.edu.au
Alternative phone contact: +61 7 3138 8822

Alternative email contact:
sef.enquiry@qut.edu.au

Ecology Major

Dr Ian Williamson
Phone: +61 7 3138 2779
Email: j.williamson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact:
sef.enquiry@qut.edu.au

Environmental Science Major

Dr Ian Williamson
Phone: +61 7 3138 2779
Email: j.williamson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact:
sef.enquiry@qut.edu.au

Forensic Science Major

Dr Emad Kiriakous
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Geoscience Major

Dr Craig Sloss
Phone: +61 7 3138 2610
Email: c.sloss@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact:
sef.enquiry@qut.edu.au

Microbiology Major

Dr Christine Knox
Email: c.knox@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact:
sef.enquiry@qut.edu.au

Physics Major

Dr Stephen Hughes
Phone: +61 7 3138 2327
Email: sw.hughes@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact:
sef.enquiry@qut.edu.au

course:

- biochemistry
- biotechnology
- chemistry
- ecology
- environmental science
- forensic science
- geoscience
- 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.

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
- 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.

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)

Handbook

Year	2013
QUT code	SC20
CRICOS	049434C
Duration (full-time)	4 years
Rank	87
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,500 per Semester
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 Marion Bateson (Science Major); Dr Tim Moroney (Mathematics)
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English

Four semesters at high school level (Years 11 and 12) with sound achievement (English (4, SA) and Maths B (4, SA)). Recommended Study: Maths C and at least one of Chemistry, Physics, Biology, Earth Science or Maths C.

International Subject prerequisites

- Maths B
- English

Four semesters with sound achievement in high school or subsequent study (English (4, SA) and Maths B (4, SA)). Maths C and knowledge of at least one of the sciences. For the majors in biochem, biotech, forensic science, and microbiology - Biology and Chemistry are recommended. 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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

IMPORTANT NOTE

As of 2013, this course will only be available for continuing Bachelor of Applied Science/Bachelor of Mathematics students and those students who are commencing in 2013 with advanced standing of 96 credit points of 1st year Bachelor of Applied Science units. New students - please refer to Bachelor of Science/Bachelor of Mathematics. Please contact sef.enquiry@qut.edu.au for any enquiries.

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. A stronger training in mathematics and statistics enhances your capabilities in modelling analysis and design.

This four year double degree course integrates studies in one of the science majors with studies in mathematics. The science majors available are biochemistry, biotechnology, chemistry, ecology, environmental science, forensic science, geoscience, microbiology and physics.

The mathematics component offers studies in core mathematics, applied mathematics, computational mathematics, discrete mathematics, financial mathematics, mathematical modelling, operations research, statistics, statistical modelling, scientific computation and data visualisation.

Professional Recognition

Membership of the Australian Mathematical Society, the Statistical Society of Australia and the Australian Society for Operations Research is available. Graduates will satisfy the requirements for membership in the relevant professional body for their chosen science major.

Financial Support

You should consider applying for an industry-sponsored mathematics bursary to help you financially throughout your studies. For further information visit [scholarships](#).

Further Information

For further information about this course please contact:

Science Coordinator

Dr Marion Bateson
Phone: +61 7 3138 1269
Email: m.bateson@qut.edu.au

Mathematics Coordinator

Dr Tim Moroney
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

In this list

- [Level 1 Units:](#)
- [Level 2 and 3 Mathematics Units:](#)
- [Level 2 and 3 Science Units:](#)
- [Science Elective Units:](#)

Course Notes	
Code	Title

Bachelor of Applied Science/Bachelor of Mathematics

As of 2013, the below Level 1 Science Foundation units will no longer be available. Only SCB111 will be available for Semester 1 2013, and then discontinued. Students who have not completed these units prior to 2013, should undertake the replacement unit stated in the revised SC01 course structure related to their major.

Also, as of 2013, MAB101 will not be available to students undertaking this course. Students who have not completed MAB101 prior to 2013, must undertake another unit from the Level 2 and Level 3 Mathematics unit options.

Course Notes

Code	Title
Students must complete at least (a) 192 credit points (16 twelve credit point units) of Mathematics units and (b) 192 credit points (16 twelve credit point units) of Science units, according to the requirements as follows:	

Level 1 Units:

Code	Title
Students must complete the following Level 1 Mathematics units:	

MAB101	Statistical Data Analysis 1
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If MAB101 is not completed prior to 2013, please select another unit from the Level 2 and 3 Mathematics unit options.

MAB120	Foundations of Calculus and Algebra
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MAB121	Single Variable Calculus and Differential Equations
--------	---

MAB122	Linear Algebra and Multivariable Calculus
--------	---

MAB210	Probability and Stochastic Modelling 1
--------	--

MAB220	Computational Mathematics 1
--------	-----------------------------

MAB120 is for students who do not have an exit assessment of at least Sound Achievement in four semesters of both Senior Mathematics B and Senior Mathematics C (or equivalent).

Students with Sound Achievement in both Senior Mathematics B and C take a level 2 Mathematics unit option instead of MAB120.

Students must complete the following Level 1 Science Foundation units:

SCB110	Science Concepts and Global Systems
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SCB111	Chemistry 1
--------	-------------

Cellular Basis of Life

In addition, students are required to complete any mandatory units - and should complete all recommended units, specified for the science major selected.

Level 2 and 3 Mathematics Units:

Code	Title
At least 120 credit points (10 twelve credit point units) must be taken from Level 2 and Level 3 Mathematics units with at least 48 credit points (4 twelve credit point units) from Level 3 Mathematics units:	
Students who have not completed MAB101 prior to 2013, must select an additional unit from the Level 2 and 3 Mathematics unit options.	
Students must complete:	
MAB311	Advanced Calculus
MAB312	Linear Algebra

Level 2 and 3 Science Units:

Code	Title
At least 96 credit points (8 twelve-credit point units) must be taken from Level 2 and Level 3 Science units with at least 48 credit points (4 twelve credit point units) from Level 3 Science units. The science units must meet the advanced level requirements of one of the following majors of the SC01 Bachelor of Applied Science course: Biochemistry; Biotechnology; Chemistry; Ecology; Environmental Science; Forensic Science; Geoscience: Microbiology or Physics.	

Science Elective Units:

Code	Title
The Mathematics unit (or units) normally undertaken in the first year of SC01 Bachelor of Applied Science is replaced by a Science elective unit (or units). This Science elective unit can be from any level. The level 2 Mathematics unit in the Physics major is replaced by a level 2 Science elective unit.	

Handbook

Year	2013
QUT code	SE20
CRICOS	078353G
Duration (full-time)	4 years
OP	7
Rank	87
OP Guarantee	Yes
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4,200 per Semester (48 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 Ian Williamson (Science Major); Dr Tim Moroney (Mathematics Major)
Discipline Coordinator	

Domestic Assumed knowledge

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

- Maths B
- English

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 or Maths C.

International Subject prerequisites

- Maths B
- English

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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Aim

Gain highly sought after knowledge and skills in mathematics and statistics to enhance your capabilities in modelling analysis and design.

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. A stronger training in mathematics and statistics enhances your capabilities in modelling analysis and design.

The science component of the course offers you the choice of majoring in chemistry, biology, environmental science, earth science or physics. Theoretical aspects are balanced by strong practical components in this science and information technology double degree.

The mathematics component offers

studies in core mathematics, applied mathematics, computational mathematics, discrete mathematics, financial mathematics, mathematical modelling, operations research, statistics, statistical modelling, scientific computation and data visualisation.

Non-standard attendance

Field work is a requirement of some areas of science.

Career Outcomes

Studying a double degree in applied science and mathematics will provide you with advanced knowledge and skills that are highly sought after by employers.

- natural resources: measuring fish populations and predicting sustainable fishing limits
- agriculture: from climate modelling to the interaction between crop yields and prices, harvest schedules and environmental impacts
- genetics: including gene sequencing and quantitative genetics
- chemistry and biochemistry: operations research and statistical techniques to improve workflow processes of chemical laboratories. Scientific computation and visualisation related to research areas such as drug design using combinatorial chemistry
- infection and disease control: using statistics and mathematical modelling
- bioinformatics: analysing and modelling data arising in molecular biology, genome sequencing and gene networks
- physical measuring and imaging techniques: measuring and modelling using applied and computational mathematics.

Professional membership

Membership of the Australian Mathematical Society, the Statistical Society of Australia and the Australian Society for Operations Research is available. Graduates will satisfy the requirements for membership in the relevant professional body for their chosen science major.

Further Information

For further information about this course please contact:

Science Coordinator

Dr Ian Williamson
Phone: +61 7 3138 2779
Email: i.williamson@qut.edu.au

Mathematics Coordinator

Dr Tim Moroney

Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

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	
SEB101	Science in Context
SEB102	Understanding Science
SEB113	Quantitative Methods in Science
SEB114	Experimental Science
Year 1 Semester 2	
MAB120	Foundations of Calculus and Algebra
Science Major Unit	
Science Major Unit	
Science Core Options Unit	
Year 2 Semester 1	
MAB121	Single Variable Calculus and Differential Equations
MAB122	Linear Algebra and Multivariable Calculus
Science Major Unit	
Science Major Unit	
Year 2 Semester 2	
Science Major Unit	
Science Major Unit	
Year 3 Semester 1	
MAB311	Advanced Calculus
MAB312	Linear Algebra
Science Major Unit	
Science Major Unit	
Year 3 Semester 2	
Science Major Unit	
Science Major Unit	
Mathematics Unit	
Mathematics Unit	
Year 4 Semester 1	
Science Core Options Unit	
Mathematics Unit	
Mathematics Unit	
Mathematics Unit	
Year 4 Semester 2	
Mathematics Unit	
Mathematics Unit	
Mathematics Unit	
Mathematics Unit	

Bachelor of Applied Science (Honours)

OR	
Elective	
Year 1, Semester 2	
HLP102	Research Seminars
HLP103-2	Dissertation
OR	
Elective	
HLP103-3	Dissertation
HLP103-4	Dissertation
Electives	
Dissertation	
<p>The Dissertation is one unit valued at 48 credit points and represents 50 per cent of the Honours course. Work on the dissertation commences during semester 1 (full-time mode) or semester 2 (part-time mode) and is completed over the course of the program. Preparation and presentation of the Dissertation is completed under the guidance of a supervisor.</p>	

Handbook

Year	2013
QUT code	IT04
CRICOS	059710E
Duration (full-time)	3 years
OP	1
Rank	99
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4300 per Semester (48 credit points)
International fee (indicative)	2013: \$12,000 per Semester
Total credit points	
Start months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Int. Start Months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Course Coordinator	Richard Thomas
Discipline Coordinator	

Domestic Entry requirements 2013 questionnaires have closed

Questionnaires for the 2013 intake were due to completed on the 16 November 2012 and are now closed. If you had not submitted the questionnaire and you are considering applying to study in 2014 we recommend you read the following information as a guide only as it details requirements for entry in 2013 and these may change prior to the 2014 intake. You may also wish to consider applying for the standard entry program for 2013 entry.

Prerequisites

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Additional entry requirements

In addition to applying through QTAC and you must also submit the [online Science and Engineering Dean's Scholars questionnaire](#) by the closing date.

Please note submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Closing date

Submit the [online questionnaire](#) with QUT by Friday, 16 November 2012.

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)).

International Entry requirements Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional Entry Requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available August) by the closing date.

Please Note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

International Subject prerequisites

- English

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 A, B or C (4, SA)).

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Please Note

As of 2013, all new Dean's Scholar applicants will be admitted into the standard Bachelor programs, with no accelerated studies and no pre-approved articulation to Honours degrees.

Eligibility Criteria

Applicants must:

- have completed Year 12 in the year they apply for the program, or the previous year
- have received an OP 1 (or equivalent)
- be starting university for the first time
- demonstrate leadership experience and potential
- demonstrate community participation and engagement
- apply for and gain a place in the relevant Dean's Scholars Program

If studying at QUT International College (QUTIC), applicant must have a grade point average (GPA) of at least 6.5 for the two semesters immediately before they apply for the Dean's Scholars Program.

If expecting to get an OP of 1-3, applicant should apply for consideration.

Financial Support as of 2013.

Successful applicants will receive:

- A scholarship of up to \$6,000 per annum, usually payable in 2 instalments of \$3,000 by the 2nd week of semester 1 and semester 2 of each year. The scholarship would apply for the full-time duration of the undergraduate degree, contingent upon students meeting the conditions of the program (refer to Conditions below). The total value of the scholarship is limited to \$18,000 for the 3 year programs and \$24,000 for the 4 year programs.

Conditions as of 2013.

To keep a place in the Dean's Scholars program, students must:

- maintain enrolment full-time in the eligible undergraduate course
- graduate from the Bachelor of Games and Interactive Entertainment within 3 years of starting, except where you've taken a leave of absence approved by the Assistant Dean, or there are other extenuating circumstances
- maintain a grade point average (GPA) of at least 6.0 each semester
- meet the requirements of program completion (for example work experience and work integrated learning)
- pay any costs associated with their program that aren't covered by the scholarship, including additional and repeated units
- demonstrate adequate participation in extracurricular elements of the program.

Students can:

- apply to change their course structure under exceptional circumstances. Students must apply through their academic mentor or course coordinator, and receive prior written approval from the Assistance Dean International and Engagement.

- apply [for other scholarships and bursaries](#), including ones associated with travel, as long as they are allowed to under the conditions of the other scholarship and under our [Industry sponsored student scholarships policy](#).

Financial Support prior to 2013

Domestic students offered a place in the Dean's Scholars Program will have their undergraduate HECS paid by the Faculty and those proceeding to Honours will also receive full HECS support.

International students will have one-third of their tuition fees paid by the faculty for the undergraduate and honours programs.

Students are responsible for all other costs associated with their program.

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. 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, 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 24 credit-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), architecture and interior design to encourage the creation of interesting and unique models within the virtual environment.

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
- Legal Issues
- Marketing
- Mathematics for Games
- Mobile and Network Technologies
- Physics for Games
- Software Technologies
- Advanced Software Technologies^
- Sound Design

#Requirement for this major is an SA or better in Queensland Maths B (or equivalent).

*Only available to those undertaking the animation major.

^Only available to those undertaking the software technologies major.

Professional Recognition

As a graduate of the Dean's Scholars Program you will be qualified for professional accreditation and employment in fields relevant to your specialisation.

Career Outcomes

Depending on your specialisation, graduates may find employment as a games/digital media programmer, game designer, simulation developer or designer, animator, film and television special effects developer, games/digital media reviewer, video game tester, sound designer, mobile entertainment and communications developer, web

developer, digital product strategist, computer systems engineer, multimedia designer, software engineer, or technical officer.

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 special topic. You will complete your units for your chosen major, minor and electives.

Note:

The Faculty may wish to make your project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

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 Education 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 [Cooperative Education Program](#).

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

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Domestic 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.

Digital Media

This major will prepare you for careers as digital game designers, developers and multimedia architects, making use of the rapid convergence of mixing graphics, video, animation and sound to meet the increasingly complex world of digital entertainment. Organisations are also interested in the strategies that multimedia architects contribute to achieving maximum efficiency and competitiveness, such as integrating multimedia content with information in enterprise software systems and the organisation's websites.

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
- Legal Issues
- Marketing
- Mathematics for Games
- Mobile and Network Technologies
- Physics for Games
- 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
- 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 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.

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.

Digital Media

This major will prepare you for careers as digital game designers, developers and multimedia architects, making use of the rapid convergence of mixing graphics, video, animation and sound to meet the increasingly complex world of digital entertainment. Organisations are also interested in the strategies that multimedia architects contribute to achieving maximum efficiency and competitiveness, such as integrating

multimedia content with information in enterprise software systems and the organisation's websites.

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
- Legal Issues
- Marketing
- Mathematics for Games
- Mobile and Network Technologies
- Physics for Games
- 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
- 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 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

Code	Title
Course Notes	
Refer to IT04 course structure.	

Handbook

Year	2013
QUT code	IT06
CRICOS	059712C
Duration (full-time)	3 years
OP	1
Rank	99
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4400 per Semester (48 credit points)
International fee (indicative)	2013: \$11,800 per Semester
Total credit points	
Start months	February Fixed closing date - 16 November 2012.
Int. Start Months	February Fixed closing date - 30 November
Course Coordinator	Richard Thomas
Discipline Coordinator	

Domestic Entry requirements 2013 questionnaires have closed

Questionnaires for the 2013 intake were due to completed on the 16 November 2012 and are now closed. If you had not submitted the questionnaire and you are considering applying to study in 2014 we recommend you read the following information as a guide only as it details requirements for entry in 2013 and these may change prior to the 2014 intake. You may also wish to consider applying for the standard entry program for 2013 entry.

Prerequisites

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Additional entry requirements

In addition to applying through QTAC and you must also submit the [online Science and Engineering Dean's Scholars questionnaire](#) by the closing date.

Please note submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Closing date

Submit the [online questionnaire](#) with QUT by Friday, 16 November 2012.

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)).

International Entry requirements Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional entry requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available October) by the closing date.

Please note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Applicants will be notified via email when the questionnaire is available.

International Subject prerequisites

- English

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 A, B or C (4, SA)).

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Please Note

As of 2013, all new Dean's Scholar applicants will be admitted into the standard Bachelor programs, with no accelerated studies and no pre-approved articulation to Honours degrees.

Eligibility Criteria

Applicants must:

- have completed Year 12 in the year they apply for the program, or the previous year
- have received an OP 1 (or equivalent)
- be starting university for the first time
- demonstrate leadership experience and potential
- demonstrate community participation

and engagement

- apply for and gain a place in the relevant Dean's Scholars Program

If studying at QUT International College (QUTIC), applicant must have a grade point average (GPA) of at least 6.5 for the two semesters immediately before they apply for the Dean's Scholars Program.

If expecting to get an OP of 1-3, applicant should apply for consideration.

Financial Support as of 2013.

Successful applicants will receive:

- A scholarship of up to \$6,000 per annum, usually payable in 2 instalments of \$3,000 by the 2nd week of semester 1 and semester 2 of each year. The scholarship would apply for the full-time duration of the undergraduate degree, contingent upon students meeting the conditions of the program (refer to Conditions below). The total value of the scholarship is limited to \$18,000 for the 3 year programs and \$24,000 for the 4 year programs.

Conditions as of 2013.

To keep a place in the Dean's Scholars program, students must:

- maintain enrolment full-time in the eligible undergraduate course
- graduate from the Bachelor of Corporate Systems Management within 3 years of starting, except where you've taken a leave of absence approved by the Assistant Dean, or there are other extenuating circumstances
- maintain a grade point average (GPA) of at least 6.0 each semester
- meet the requirements of program completion (for example work experience and work integrated learning)
- pay any costs associated with their program that aren't covered by the scholarship, including additional and repeated units
- demonstrate adequate participation in extracurricular elements of the program.

Students can:

- apply to change their course structure under exceptional circumstances. Students must apply through their academic mentor or course coordinator, and receive prior written approval from the Assistance Dean International and Engagement.
- apply [for other scholarships and bursaries](#), including ones associated with travel, as long as they are allowed to under the conditions of the other scholarship and under our [Industry](#)

[sponsored student scholarships policy](#).

Financial Support prior to 2013

Domestic students offered a place in the Dean's Scholars Program will have their undergraduate HECS paid by the Faculty and those proceeding to Honours will also receive full HECS support.

International students will have one-third of their tuition fees paid by the faculty for the undergraduate and honours programs.

Students are responsible for all other costs associated with their program.

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-savvy 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

Career Outcomes

Career destinations from this degree are management, analyst or consultant roles such as business analyst, project manager, process analyst, program manager, or data manager in fields ranging from health to finance to media and entertainment services. If you are interested in creating your own business, you may start your own consultancy service to assist businesses in using information technology and improve their business performance. The career possibilities are numerous and relevant experience is in great demand by industry.

Professional Recognition

This course is accredited by the Australian Computer Society (ACS). ACS accreditation is internationally recognised by the Seoul Accord.

As a graduate of the Dean's Scholars Program you will be qualified for professional accreditation and employment in fields relevant to your specialisation.

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.

Bachelor of Corporate Systems Management - Dean's Scholars Program

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.

Note:

The Faculty may wish to make your project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

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 Education 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 [Cooperative Education Program](#).

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

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Domestic Course structure 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.

International Course structure

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.

Sample Structure

Refer to the [IT06 course structure](#).

Code	Title
Course Notes	

Handbook

Year	2013
QUT code	IT22
Duration (full-time)	3 years
OP	3
Rank	96
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$11,900 per Semester
Total credit points	
Course Coordinator	Mr Richard Thomas
Discipline Coordinator	

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course discontinuation

From semester one, 2009 this course will not be available for commencing students. IT22 will only be available for continuing students. New students - please refer to IT23.

Financial Support

Domestic students offered a place in the Dean's Scholars Program will have their undergraduate HECS paid by the Faculty and those proceeding to Honours will also receive full HECS support.

International students will have one-third of their tuition fees paid by the faculty for the undergraduate and honours programs.

Students are responsible for all other costs associated with their program.

Cooperative Education Program

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. Students wishing to participate in the Cooperative Education Program should be aware that they will not receive financial support as a Dean's Scholar for the duration of the placement.

Find out more about the [Cooperative Education Program](#).

Professional Recognition

As a graduate of the Dean's Scholars Program you will be qualified for professional accreditation and employment in fields relevant to your specialisation.

New Unit

Translations/Incompatibility Table

Details on the translation and incompatibility of old and new units is located here:

[Undergraduate Translation Table](#) and [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.

Further Information

For further information about this course, please contact the following:

Richard Thomas
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Sample Structure Semesters

- [Course Structure](#)
- [Recommended Core Unit Progression](#)
- [Year 1, Semester 2](#)
- [Year 2, Semester 1](#)
- [Year 2, Semester 2](#)
- [Year 2, Summer](#)
- [Year 3, Semester 1](#)
- [Year 3, Semester 2](#)
- [Year 3, Summer](#)

Code	Title
Course Structure	
Recommended Core Unit Progression	
Year 1, Semester 2	
INB270	Programming
INB251	Networks
INB271	The Web
Intermediate Level Elective	
Year 2, Semester 1	
Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	
Year 2, Semester 2	
INB301	The Business of IT
Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	
Year 2, Summer	
INB302	IT Capstone Project
Undertaken over four (4) weeks.	
Year 3, Semester 1	
Block B or Block C Unit	

Bachelor of Information Technology - Dean's Scholars Program

Block B or Block C Unit	
Block B or Block C Unit	
Block B or Block C Unit	
INN Unit	
Year 3, Semester 2	
INN700	Introduction To Research
INN Elective	
INN Elective	
INN401	Honours Dissertation 1
Year 3, Summer	
INN402	Honours Dissertation 2
INN403	Honours Dissertation 3
INN404	Honours Dissertation 4

Handbook

Year	2013
QUT code	IT28
CRICOS	017323G
Duration (full-time)	1 year
Duration (part-time domestic)	2 years
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$11,700 per Semester
Total credit points	96
Start months	February, July
Int. Start Months	February, July
Course Coordinator	Dr Jinglan Zhang
Discipline Coordinator	

Domestic Entry requirements

Entry Requirements

Applicants must have:

- a bachelor degree from QUT or its equivalent, completed within 18 months prior to enrolment, with a minimum grade point average of 5 (on a 7-point scale) or its equivalent, **or**
- demonstrated outstanding performance in the final year of the degree, **or**
- work experience or research considered appropriate by the course coordinator.

International Entry requirements

Entry Requirements

Applicants must have:

- a bachelor degree from QUT or its equivalent, completed within 18 months prior to enrolment, with a minimum grade point average of 5 (on a 7-point scale) or its equivalent, **or**
- demonstrated outstanding performance in the final year of the degree, **or**
- work experience or research considered appropriate by the course coordinator.

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Why Do Honours

The honours program will expand your career options through exposure to the world of research. Honours is also the perfect pathway to an academic career through PhD studies, where you can become an independent researcher in your own right.

An honours degree signals to potential employers that you are someone with exceptional ability, motivation and commitment to your field. It gives you the chance to integrate the practical and conceptual knowledge gained through your degree. As an honours graduate, you can clearly demonstrate an ability to undertake rigorous independent research. These skills are unique to the honours program and will differentiate you from your peers in the employment market.

Course Design

The core of the honours program is a 36, 48, or 60 credit-point project (depending on your study area) that will provide students with the opportunity to learn about research by conducting a research project with an experienced researcher who acts as both supervisor and mentor. Students will learn the types of processes, creativity and analytical thinking that lead to scientific and technological advances and how to communicate such findings in a rigorous, systematic manner.

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

You will qualify for professional accreditation and employment in the field relevant to the specialisations chosen.

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.

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.

Important Information

Duration

Except in special circumstances as approved by the Dean, the requirements for an Honours degree must be completed within two successive years following first enrolment.

Unsatisfactory Progress

Failure to make satisfactory progress with either the course work component of an Honours program or with the dissertation, or both, may lead to exclusion from the program.

Unsatisfactory progress consists of:

- receiving a grade of less than 4 (or Satisfactory, where applicable) in one unit of the course work component.
- failure to make sufficient progress with the dissertation component, in the opinion of the Dean.

A student who is excluded from or otherwise fails to complete an Honours program will not normally be readmitted to that program.

Assessment

The minimum grade which may be credited towards an Honours degree is 4 (or Satisfactory, where applicable).

A minimum of three copies of a dissertation should be presented to the supervisor for examination. Dissertations should be temporarily bound in order to facilitate the making of any revisions and editorial changes required by the examiners before final printing and binding. Dissertations will be examined by an examining committee appointed by the Dean and consisting of a least two examiners, one of whom may be external to the University. The supervisor of the candidate's work may be a member of the committee but may not chair the

committee or act as the primary examiner.

Determination of Level of Honours Awards

The Faculty Academic Board will determine the level of Honours awarded.

Honours degrees will be awarded at the following levels after account is taken of the candidate's performance in all units and appropriate weight applied to the dissertation:

- Honours 1 - First Class Honours
- Honours 2A - Second Class Honours, Division A
- Honours 2B - Second Class Honours, Division B
- Honours 3 - Third Class Honours

The level of Honours award is to be determined by guidelines, as follows:

- Honours 1 - GPA 6.50-7.00, or equivalent
- Honours 2A - GPA 5.50-6.49, or equivalent
- Honours 2B - GPA 4.50-5.49, or equivalent
- Honours 3 - GPA 4.00-4.49, or equivalent

A candidate who does not reach the standard required for Honours 3 remains with a pass degree.

Note:

The Faculty may wish to make your project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

Further Information

For further information about this course, please contact:

Dr Jinglan Zhang
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Domestic Course structure 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 Honours 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

Bachelor of Information Technology (Honours)

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.

International Course structure 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.

Sample Structure Semesters

- [FULL TIME](#)
- [Year 1, Semester 1](#)
- [Year 1, Semester 2](#)
- [PART TIME](#)
- [Year 1, Semester 1](#)
- [Year 1, Semester 2](#)
- [Year 2, Semester 1](#)
- [Year 2, Semester 2](#)

Code	Title
FULL TIME	
Year 1, Semester 1	
INN700	Introduction To Research
INN401	Honours Dissertation 1
INN701	Advanced Research Topics
Elective	
Year 1, Semester 2	
INN402	Honours Dissertation 2
INN403	Honours Dissertation 3
INN404	Honours Dissertation 4
Elective	
PART TIME	
Year 1, Semester 1	
INN700	Introduction To Research
INN401	Honours Dissertation 1
Year 1, Semester 2	

INN402	Honours Dissertation 2
Elective	
Year 2, Semester 1	
INN403	Honours Dissertation 3
Elective	
Year 2, Semester 2	
INN404	Honours Dissertation 4
Elective	
Elective Units - Students should choose advanced level postgraduate units. Normally units are undertaken in the area of the student's undergraduate major. Students wishing to enrol in a unit that is not of an advanced level should contact the Course Coordinator.	
INN701 enrolment - Though students are required to enrol in INN701 in their first semester of honours, the unit offers flexible enrolment through (a) a choice of modules on offer, and through (b) the option of undertaking the minimum necessary number of modules across more than one semester (see INN701 week 1 document for further details on enrolment flexibility).	
Full-time students should be aware that many electives may be offered evenings only.	

Handbook

Year	2013
QUT code	IT29
CRICOS	017323G
Duration (full-time)	1 year
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$11,700 per Semester
Total credit points	96
Start months	February, July
Int. Start Months	February, July
Course Coordinator	Dr Jinglan Zhang
Discipline Coordinator	

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Overview

The '**Accelerated Honours**' program has been structured to provide an incentive for high achieving IT undergraduate students to continue into the Honours Program.

Benefits of this accelerated program are:

- * you are approved to undertake a concurrent enrolment in the final semester of your IT undergraduate course, that is to say, the student may enrol in undergraduate units and Honours.

- * 12 credit points will be credited towards Block 3 electives in your IT undergraduate course on the basis of coursework studies completed in IT29 Honours.

- * you are able to complete a four year program within 3 1/2 years.

Through a combination of research and advanced coursework units students can pursue specialised studies in a particular area of information technology. The course offers the opportunity to develop research and development skills, work on cutting-edge technology, and have access to specialist hardware and software. As a successful Honours graduate you are eligible to start a doctoral program, and can expect to obtain a research or teaching position. A wider range of career opportunities are available.

Please note: tuition fees normally apply for Summer enrolment.

Why Do Honours

The honours program will expand your career options through exposure to the world of research. Honours is also the perfect pathway to an academic career through PhD studies, where you can become an independent researcher in your own right.

An honours degree signals to potential employers that you are someone with exceptional ability, motivation and commitment to your field. It gives you the chance to integrate the practical and

conceptual knowledge gained through your degree. As an honours graduate, you can clearly demonstrate an ability to undertake rigorous independent research. These skills are unique to the honours program and will differentiate you from your peers in the employment market.

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

You will qualify for professional accreditation and employment in the field relevant to the specialisations chosen.

Important Information

Assessment

The minimum grade which may be credited towards an Honours degree is 4 (or Satisfactory, where applicable).

A minimum of three copies of a dissertation should be presented to the supervisor for examination. Dissertations should be temporarily bound in order to facilitate the making of any revisions and editorial changes required by the examiners before final printing and binding.

Dissertations will be examined by an examining committee appointed by the Dean and consisting of a least two examiners, one of whom may be external to the University. The supervisor of the candidate's work may be a member of the committee but may not chair the committee or act as the primary examiner.

Determination of Level of Honours Awards

The Faculty Academic Board will determine the level of Honours awarded.

Honours degrees will be awarded at the following levels after account is taken of the candidate's performance in all units

Bachelor of Information Technology (Honours) - Accelerated Program

and appropriate weight applied to the dissertation:

Honours 1 - First Class Honours
Honours 2A - Second Class Honours, Division A
Honours 2B - Second Class Honours, Division B
Honours 3 - Third Class Honours

The level of Honours award is to be determined by guidelines, as follows:

Honours 1 - GPA 6.50-7.00, or equivalent
Honours 2A - GPA 5.50-6.49, or equivalent
Honours 2B - GPA 4.50-5.49, or equivalent
Honours 3 - GPA 4.00-4.49, or equivalent

A candidate who does not reach the standard required for Honours 3 remains with a pass degree.

Unsatisfactory Progress

Failure to make satisfactory progress with either the course work component of an Honours program or with the dissertation, or both, may lead to exclusion from the program.

Unsatisfactory progress consists of:

- receiving a grade of less than 4 (or Satisfactory, where applicable) in one unit of the course work component.
- failure to make sufficient progress with the dissertation component, in the opinion of the Dean.

A student who is excluded from or otherwise fails to complete an Honours program will not normally be readmitted to that program.

Note:

The Faculty may wish to make your project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

Futher Information

For further information about this course, please contact:

Dr Jinglan Zhang
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Domestic Course structure

The Accelerated Honours program has been structured to provide an incentive for high achieving IT undergraduate students to continue into the Honours Program. Benefits of this accelerated program are:

- you are approved to undertake a

concurrent enrolment in the final semester of your IT undergraduate course. That is to say, you may enrol in undergraduate units and Honours

- 12 credit points will be credited towards Block 3 electives in your IT undergraduate course on the basis of coursework studies completed in IT29 Honours
- you are able to complete a 4 year program within 3 1/2 years.

Through a combination of research and advanced coursework units students can pursue specialised studies in a particular area of information technology. The course offers the opportunity to develop research and development skills, work on cutting-edge technology, and have access to specialist hardware and software. As a successful Honours graduate you are eligible to start a doctoral program, and can expect to obtain a research or teaching position. A wider range of career opportunities are available.

International Course structure

The Accelerated Honours program has been structured to provide an incentive for high achieving IT undergraduate students to continue into the Honours Program. Benefits of this accelerated program are:

- you are approved to undertake a concurrent enrolment in the final semester of your IT undergraduate course. That is to say, you may enrol in undergraduate units and Honours
- 12 credit points will be credited towards Block 3 electives in your IT undergraduate course on the basis of coursework studies completed in IT29 Honours
- you are able to complete a 4 year program within 3 1/2 years.

Through a combination of research and advanced coursework units students can pursue specialised studies in a particular area of information technology. The course offers the opportunity to develop research and development skills, work on cutting-edge technology, and have access to specialist hardware and software. As a successful Honours graduate you are eligible to start a doctoral program, and can expect to obtain a research or teaching position. A wider range of career opportunities are available.

Sample Structure Semesters

- [Year 3, Semester 1*](#)

- [Year 3, Semester 2](#)
- [Year 3, Semester 3](#)
- [MID YEAR ENTRY](#)
- [Year 3, Semester 2*](#)
- [Year 3, Semester 3](#)
- [Year 4, Semester 1](#)

Code	Title
Year 3, Semester 1*	
Elective	
Year 3, Semester 2	
INN700	Introduction To Research
INN401	Honours Dissertation 1
INN701	Advanced Research Topics
Elective	
Year 3, Semester 3	
INN402	Honours Dissertation 2
INN403	Honours Dissertation 3
INN404	Honours Dissertation 4
* The first semester of the Accelerated Honours Program occurs in the final semester of an undergraduate IT course (48 credit points remaining). This involves a concurrent enrolment with the undergraduate course (36 credit points enrolment) and 12 credit points Honours elective undertaken within the IT29 course.	
Elective Units - Students should choose from the list of advanced level postgraduate units. Normally units are undertaken in the area of the student's undergraduate major. Students wishing to enrol in a unit other than those listed should contact the Course Coordinator. Students should note that many electives might be offered in the evenings only.	
Please note: tuition fees normally apply for Summer enrolment. Dean's Scholars should contact their IT Course Coordinator for further details.	
MID YEAR ENTRY	
Year 3, Semester 2*	
Elective	
Year 3, Semester 3	
INN700	Introduction To Research
INN401	Honours Dissertation 1
INN402	Honours Dissertation 2
INN701	Advanced Research Topics
Year 4, Semester 1	
INN403	Honours Dissertation 3
INN404	Honours Dissertation 4
Elective	
Elective	
* The first semester of the Accelerated Honours Program occurs in the final semester of an undergraduate IT course (48 credit points remaining). This involves a concurrent enrolment with the undergraduate course (36 credit points enrolment) and 12 credit points Honours elective undertaken within the IT29 course.	
Elective Units - Students should choose advanced level postgraduate units. Normally units are undertaken in the area of the student's undergraduate major. Students wishing to enrol in a unit that is not of an advanced level should contact the Course Coordinator. Students should note that many electives might be offered in the evenings only.	
Please note: tuition fees normally apply for Summer enrolment.	

Handbook

Year	2013
QUT code	MA54 + SC60
Duration (full-time)	3 years
OP	1
Rank	99
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
Total credit points	384 (BMaths 288 cp and BAppSc(Hons) 96cp)
Credit points full-time sem.	48
Start months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Int. Start Months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Course Coordinator	Mr Richard Thomas
Discipline Coordinator	A/Prof Dann Mallet 07 3138 2354 dg.mallet@qut.edu.au

Domestic Entry requirements Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional Entry Requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available August) by the closing date.

Please Note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Domestic Assumed knowledge

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

- Maths B
- English
- Chemistry

Assumed knowledge includes English (4, SA) and Maths B (4, VHA) plus two (2) of Biological Science, Chemistry, Earth Science, Maths C or Physics (4, VHA)

International Entry requirements Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional Entry Requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available August) by the closing date.

Please Note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

International Subject prerequisites

- Physics
- Maths C
- Maths B
- English
- Chemistry

Subject prerequisites include English (4, SA) and Maths B (4, VHA) plus two (2) of Biological Science, Chemistry, Earth Science, Maths C or Physics (4, VHA)

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Please Note

As of 2013, all new Dean's Scholar applicants will be admitted into the standard Bachelor programs, with no accelerated studies and no pre-approved articulation to Honours degrees. Please refer to MA54 Bachelor of Mathematics Dean's Scholar Program.

Overview

The Dean's Scholars Program in Mathematics offers an enriched course of study, with an early introduction to mathematical research, for students who obtain outstanding levels of academic achievement at Secondary School. At the same time it provides the option of an accelerated pathway by which these students are able to complete the Bachelor of Mathematics course plus the Bachelor of Applied Science (Honours) course in a total of just three years.

Mathematics Dean's scholars are able to undertake research enrichment units and individually-tailored tutorial programs:

Sample Structure Semesters

- [Year 1, Semester 1 \(48 cp\)](#)

Bachelor of Mathematics & Bachelor of Applied Science (Honours) - Dean's Scholars Honours Program

- [Year 1, Semester 2 \(48 cp\)](#)
- [Year 2, Semester 1 \(48 cp\)](#)
- [Year 2, Semester 2 \(48 cp\)](#)
- [Year 3, Semester 1 \(48 cp\)](#)
- [Year 3, Semester 2 \(48 cp\)](#)
- [Year 4, Semester 1 \(48 cp\) and Semester 2 \(48 cp\)](#)
- [Notes:](#)

Code	Title
Year 1, Semester 1 (48 cp)	
Normal BMaths and BAppSc(Hons) units: BMaths Coursework (48 cp)	
Year 1, Semester 2 (48 cp)	
Dean's Scholars Program enrichment unit:	
SCB303	Tutorial Program for Dean's Scholars
Normal BMaths and BAppSc(Hons) units: BMaths Coursework (36 cp)	
Year 2, Semester 1 (48 cp)	
Dean's Scholars Program enrichment unit:	
SCB401	Research Methods for Dean's Scholars
Or other approved unit	
Normal BMaths and BAppSc(Hons) units: BMaths Coursework (36 cp)	
Year 2, Semester 2 (48 cp)	
Normal BMaths and BAppSc(Hons) units: BMaths Coursework (48 cp)	
Year 3, Semester 1 (48 cp)	
Dean's Scholars Program enrichment unit:	
SCB501-1	Research Project for Dean's Scholars
Normal BMaths and BAppSc(Hons) units: BAppSc Coursework (36 cp)	
Year 3, Semester 2 (48 cp)	
Dean's Scholars Program enrichment unit:	
SCB501-2	Research Project for Dean's Scholars
Normal BMaths and BAppSc(Hons) units: BMaths Coursework (36 cp)	
Year 4, Semester 1 (48 cp) and Semester 2 (48 cp)	
Normal BMaths and BAppSc(Hons) units: BAppSc(Hons) Coursework/Research (48 cp)	
Normal BMaths and BAppSc(Hons) units: BAppSc(Hons) Coursework/Research (48 cp)	
Notes:	
- The exact timing of Dean's Scholars Program enrichment units may be varied to suit the student's chosen program of study.	
- It is also possible to complete the program in 3.5 years using a combination of the 3 and 4 year structures. There is also flexibility for students to undertake Dean's Scholars Program enrichment units during the summer semesters between years 1 and 2, and years 2 and 3 to lighten regular semester study loads or to assist in acceleration.	

Handbook

Year	2013
QUT code	SC01 + SC60
Duration (full-time)	3 years
OP	2
Rank	98
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$12,900 per Semester
Total credit points	384 [BAppSc 288 cp and BAppSc(Hons) 96 cp]
Start months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Int. Start Months	February Fixed closing date: The online questionnaire must be submitted by 16 November 2012
Course Coordinator	Mr Richard Thomas
Discipline Coordinator	Associate Professor John Aaskov (Microbiology, Biochemistry, Biotechnology Majors); Dr Madeleine Schultz (Chemistry Major); Dr Konstantin Momot (Physics major)

Domestic Entry requirements Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional Entry Requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available August) by the closing date.

Please Note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

Domestic Assumed knowledge

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

- Physics
- Maths C
- Maths B
- English
- Chemistry

English (4, SA) and Maths B (4, VHA) plus two (2) of Biological Science, Chemistry, Earth Science, Maths C or Physics (4, VHA). We assume that you have knowledge equivalent to four semesters at high school level (Years 11 and 12).

International Entry requirements Prerequisite

1. Must be a current Year 12 student or a student returning from a gap year who completed their Year 12 education in Australia.
2. Successful questionnaire

Closing date

Submit the questionnaire with QUT by Friday, 16 November 2012.

Additional Entry Requirements

In addition to applying through [QTAC](#) and you must also submit the online Science and Engineering Dean's Scholars questionnaire (available August) by the closing date.

Please Note: Submitting the questionnaire with QUT is separate and in addition to listing the course as a preference with [QTAC](#). To successfully apply for entry into this course you are required to do both.

International Subject prerequisites

- Physics
- Maths C
- Maths B
- English
- Chemistry

English (4, SA) and Maths B (4, VHA) plus two (2) of Biological Science, Chemistry, Earth Science, Maths C or Physics (4, VHA). 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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course update

From Semester One 2013 this course will not be available for commencing students. SC01 will only be available for continuing students. New students - please refer to ST01. Please contact sef.enquiry@qut.edu.au for any enquiries.

Overview

The Bachelor of Applied Science Dean's Scholars Accelerated Honours Program is an accelerated program designed specifically for outstanding current, or returning from a gap year, Year 12 students who completed their Year 12 education in Australia. It also offers an accelerated pathway that enables students to complete both the Bachelor of Applied Science and the Bachelor of

Applied Science (Honours) courses in just three years. A scholarship is offered to students in the Bachelor of Applied Science Dean's Scholars Accelerated Honours Program. Students are accepted into the program on the basis of outstanding academic ability and an interest in scientific research.

Professional Recognition

As a graduate of the Bachelor of Applied Science Dean's Scholars Accelerated Honours Program you will qualify for professional recognition and employment in fields relevant to the specialisations that you have chosen. It is expected that many Dean's Scholars will proceed to Doctor of Philosophy studies.

Financial support

Domestic students offered a place in the Dean's Scholars Program will have their undergraduate HECS paid by the Faculty and those proceeding to Honours will also receive full HECS support.

International students will have one-third of their tuition fees paid by the faculty for the undergraduate and honours programs.

Course Structure

As a student in the Dean's Scholars Accelerated Honours Program you will choose one of the following nine majors. You will also choose a co-major to accompany your major area of study. The co-major may be one of the other majors, or it could be one of the co-majors listed below:

Majors: Biochemistry, Biotechnology, Chemistry, Ecology, Environmental Science, Forensic Science, Geoscience, Microbiology, Physics.

Co-majors: Applied Geology, Astrophysics, Biodiversity, Chemistry for Industry, Life Science Technologies.

To allow the Dean's Scholars Program to be completed in an accelerated format some changes are made to the first year of the standard Bachelor of Applied Science (SC01) degree. The core units normally studied in first year are replaced by an enriched course of study which includes the following units:

SCB301 Science for Dean's Scholars

An intensive preparatory program immediately preceding the commencement of the first semester. This preparatory program commences mid-January and requires attendance for approximately 18 hours per week for six weeks.

SCB303 Tutorial Program for Dean's Scholars

An individually-tailored tutorial program during the first semester, under the guidance of an academic mentor. This unit is designed in a consultative process involving the student, the academic mentor, and the Dean.

SCB401 Research Methods for Dean's Scholars

The unit allows research skills to be developed through a literature review, experimental design considerations, research proposal formulation and writing, and the presentation of a research proposal.

SCB501 Research Project for Dean's Scholars

An individually tailored research project is carried out under the supervision of a research mentor.

Honours Program

Following the successful completion of the coursework and your initial research project in the first two years of the program, you will then commence the Bachelor of Applied Science (Honours) course. The Honours program continues the study of your chosen scientific major and also provides the opportunity to undertake a large research project. The Honours degree provides an excellent preparation to continue onto postgraduate research.

Note:

The Faculty may wish to make your project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

Further Information

For further information about this course, please contact the following:

Course Coordinator

Mr Richard Thomas
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Discipline Coordinators

Microbiology, Biochemistry, Biotechnology Majors:
Associate Professor John Aaskov
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Chemistry Major:
Dr Madeleine Schultz
Phone: +61 7 3138 8822

Email: sef.enquiry@qut.edu.au

Physics Major:

Dr Konstantin Momot
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Domestic Course structure Course Structure

As a student in the Dean's Scholars Accelerated Honours Program you will choose one of the following nine majors. You will also choose a co-major to accompany your major area of study. The co-major may be one of the other majors, or it could be one of the co-majors listed below:

Majors: Biochemistry, Biotechnology, Chemistry, Ecology, Environmental Science, Forensic Science, Geoscience, Microbiology, Physics.

Co-majors: Applied Geology, Astrophysics, Biodiversity, Chemistry for Industry, Life Science Technologies.

To allow the Dean's Scholars Program to be completed in an accelerated format some changes are made to the first year of the standard Bachelor of Applied Science (SC01) degree. The core units normally studied in first year are replaced by an enriched course of study which includes the following units:

SCB301 Science for Dean's Scholars

An intensive preparatory program immediately preceding the commencement of the first semester. This preparatory program commences mid-January and requires attendance for approximately 18 hours per week for six weeks.

SCB303 Tutorial Program for Dean's Scholars

An individually-tailored tutorial program during the first semester, under the guidance of an academic mentor. This unit is designed in a consultative process involving the student, the academic mentor, and the Dean.

SCB401 Research Methods for Dean's Scholars

The unit allows research skills to be developed through a literature review, experimental design considerations, research proposal formulation and writing, and the presentation of a research proposal.

SCB501 Research Project for Dean's Scholars

An individually tailored research project is carried out under the supervision of a research mentor.

Honours Program

Following the successful completion of the coursework and your initial research project in the first two years of the program, you will then commence the Bachelor of Applied Science (Honours) course. The Honours program continues the study of your chosen scientific major and also provides the opportunity to undertake a large research project. The Honours degree provides an excellent preparation to continue onto postgraduate research.

Note

The Faculty may wish to make your project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

International Course structure

Course Structure

As a student in the Dean's Scholars Accelerated Honours Program you will choose one of the following nine majors. You will also choose a co-major to accompany your major area of study. The co-major may be one of the other majors, or it could be one of the co-majors listed below:

Majors: Biochemistry, Biotechnology, Chemistry, Ecology, Environmental Science, Forensic Science, Geoscience, Microbiology, Physics.

Co-majors: Applied Geology, Astrophysics, Biodiversity, Chemistry for Industry, Life Science Technologies.

To allow the Dean's Scholars Program to be completed in an accelerated format some changes are made to the first year of the standard Bachelor of Applied Science (SC01) degree. The core units normally studied in first year are replaced by an enriched course of study which includes the following units:

SCB301 Science for Dean's Scholars

An intensive preparatory program immediately preceding the commencement of the first semester. This preparatory program commences mid-January and requires attendance for

approximately 18 hours per week for six weeks.

SCB303 Tutorial Program for Dean's Scholars

An individually-tailored tutorial program during the first semester, under the guidance of an academic mentor. This unit is designed in a consultative process involving the student, the academic mentor, and the Dean.

SCB401 Research Methods for Dean's Scholars

The unit allows research skills to be developed through a literature review, experimental design considerations, research proposal formulation and writing, and the presentation of a research proposal.

SCB501 Research Project for Dean's Scholars

An individually tailored research project is carried out under the supervision of a research mentor.

Honours Program

Following the successful completion of the coursework and your initial research project in the first two years of the program, you will then commence the Bachelor of Applied Science (Honours) course. The Honours program continues the study of your chosen scientific major and also provides the opportunity to undertake a large research project. The Honours degree provides an excellent preparation to continue onto postgraduate research.

Note

The Faculty may wish to make your project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

Handbook

Year	2013
QUT code	SC60
CRICOS	009041G
Duration (full-time)	1 year
Duration (part-time domestic)	2 years
Campus	Gardens Point
Domestic fee (indicative)	2013: CSP \$4200 per Semester (48 credit points)
International fee (indicative)	2013: \$13,000 per Semester
Total credit points	96
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Course Coordinator	Dr David Hurwood
Discipline Coordinator	Dr John McMurtrie (Chemistry); Dr David Hurwood (Ecology & Geology); Professor Peter Mather (Environmental Science); Associate Professor Terry Walsh (Life Science); Dr Scott McCue (Mathematics); Dr Esa Jaatinen (Physics)

Domestic Entry requirements

Applicants must have:

- a bachelor degree from QUT or its equivalent, completed within 18 months prior to enrolment, with a minimum grade point average of 5 (on a 7-point scale) or its equivalent, or
- demonstrated outstanding performance in the final year of the degree, or
- work experience or research considered appropriate by the course coordinator.

International Entry requirements

Entry requirements

Applicants must have:

- a bachelor degree from QUT or its equivalent, completed within 18 months prior to enrolment, with a minimum grade point average of 5 (on a 7-point scale) or its equivalent, or
- demonstrated outstanding performance in the final year of the degree, or
- work experience or research considered appropriate by the course coordinator.

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Overview

Through a combination of research and advanced coursework units, students can pursue specialised studies in a particular area of information technology. The course offers the opportunity to develop research and development skills, work on cutting-edge technology, and have access to specialist hardware and software. As a successful Honours graduate you are eligible to start a doctoral program, and can expect to obtain a research or teaching position. A wider range of career opportunities are available.

Course Design

The core of the honours program is a 36, 48, or 60 credit-point project (depending

on your study area) that will provide students with the opportunity to learn about research by conducting a research project with an experienced researcher who acts as both supervisor and mentor. Students will learn the types of processes, creativity and analytical thinking that lead to scientific and technological advances and how to communicate such findings in a rigorous, systematic manner.

Note:

The Faculty may wish to make your honours project or thesis work available to other students undertaking Honours studies as an exemplar. As the copyright owner of the work you have created, the Faculty will respect your rights and will seek your authorisation to share your work.

Professional Recognition

Relevant scientific professional bodies include Australasian Association of Clinical Biochemists, Australasian Institute of Mining and Metallurgy, AusBiotech Ltd, Australian Institute of Geoscientists, Australian Institute of Physics, Australian Mathematical Society, Australian Society for Biochemistry and Molecular Biology, Australian Society for Medical Research, Australian Society for Microbiology, Australian Society for Operations Research, Ecological Society of Australia, Geological Society of Australia, Royal Australian Chemical Institute, and Statistical Society of Australia. Eligibility for membership is based on the combination of units undertaken in the degree and the Bachelor of Applied Science course that underpins it.

Course Structure

The Honours year comprises coursework and a major research project supervised by QUT staff, in some cases in conjunction with local industry. Majors are offered in chemistry, ecology, environmental science, geology, life science, mathematics and physics.

Further Information

Course Coordinator

Dr David Hurwood
Phone: +61 7 3138 8822
Email: sef.enquiry@qut.edu.au

Discipline Coordinators

Chemistry

Dr John McMurtrie
Phone: +61 7 3138 1220

Bachelor of Applied Science (Honours)

Email: j.mcmurtrie@qut.edu.au

Ecology

Dr David Hurwood
Phone: +61 7 3138 5072
Email: d.hurwood@qut.edu.au

Environmental Science

Professor Peter Mather
Phone: +61 7 3138 1737
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Geology

Mr David Hurwood
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Life Science

Associate Professor Terry Walsh
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Mathematics

Dr Scott McCue
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Physics

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and how to communicate such findings in a rigorous, systematic manner.

Course Structure

The Honours year comprises coursework and a major research project supervised by QUT staff, in some cases in conjunction with local industry. Majors are offered in chemistry, ecology, environmental science, geology, life science, mathematics and physics.

Domestic Course structure

The core of the honours program is a 36, 48, or 60 credit-point project (depending on your study area) that will provide students with the opportunity to learn about research by conducting a research project with an experienced researcher who acts as both supervisor and mentor. Students will learn the types of processes, creativity and analytical thinking that lead to scientific and technological advances and how to communicate such findings in a rigorous, systematic manner.

The Honours year comprises coursework and a major research project supervised by QUT staff, in some cases in conjunction with local industry. Majors are offered in chemistry, ecology, environmental science, geology, life science, mathematics and physics.

International Course structure

Course Design

The core of the honours program is a 36, 48, or 60 credit-point project (depending on your study area) that will provide students with the opportunity to learn about research by conducting a research project with an experienced researcher who acts as both supervisor and mentor. Students will learn the types of processes, creativity and analytical thinking that lead to scientific and technological advances

Handbook

Year	2013
QUT code	BN85
CRICOS	060808G
Duration (full-time)	6 months
Duration (part-time domestic)	12 months
Campus	Gardens Point
Domestic fee (indicative)	2013: \$13,300 per Semester
International fee (indicative)	2013: \$14,000 per Semester
Total credit points	48
Credit points full-time sem.	48
Start months	February, July
Int. Start Months	February, July
Course Coordinator	ASPRO Bambang Trigunaryah
Discipline Coordinator	Science and Engineering Faculty 3138 8822 sef.enquiry@qut.edu.au

Domestic Entry requirements

A four-year full-time bachelor degree in a relevant discipline area; or a three-year full-time diploma and three or more years of relevant professional experience in a relevant discipline; and a grade point average of 5.0 or more (on a 7-point scale) in that study, or an equivalent qualification determined by the Faculty. English language requirements for the course are an English Language Proficiency level in accordance with QUT requirements (IELTS score of 6.0 with no sub-band below 6.0) if English is not your first language.

If requested, supply documentation of professional work experience as detailed in Completing the PG Form.

International Entry requirements

A four-year full-time bachelor degree in a relevant discipline area; or a three-year full-time diploma and three or more years of relevant professional experience in a relevant discipline; and a grade point average of 5.0 or more (on a 7-point scale) in that study.

Minimum english requirements

Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.0

Overview

This course serves as a preparation and pathway program for students wishing to enter a masters program in Engineering or Built Environment in the Science and Engineering Faculty. It is particularly aimed at students with either a three-year undergraduate degree, or a degree in a different area to the masters of their choice.

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 Note

The course structures are divided into two major categories: Standard program and UD50 Articulation program.

All students, except those intending to advance to UD50 Masters of Urban Development (Urban and Regional Planning), must follow the standard program.

Further Information

Science and Engineering Faculty - Phone +61 7 3138 8822, Email: sef.enquiry@qut.edu.au

Handbook

Year	2013
QUT code	BX21
Duration (part-time domestic)	2 years
Campus	Gardens Point and University of Queensland
Domestic fee (indicative)	\$3480 AUD per unit
Total credit points	48
Start months	Entry into this program is available throughout the year. For further details, contact sef.enquiry@qut.edu.au .
Course Coordinator	Professor Ted Steinberg
Discipline Coordinator	Science and Engineering Faculty 3138 8822 sef.enquiry@qut.edu.au

Domestic Entry requirements

- Bachelor of Engineering degree or equivalent as determined by the Faculty.
- Or Advanced Diploma with industry experience.
- Students with the degree qualification but who do not have second class honours may transfer after completing the Graduate Certificate provided they achieve a grade point average of 5 or more.
- Applicants must provide a letter of support from an industry that utilise power generation to be eligible to enter the program.
- Students who do not meet the entry requirements for the Master of Engineering (Power Generation) may be eligible to enrol in the Graduate Certificate in Engineering (Power Generation) as a pathway to the masters program.
- Students can also study [individual power generation units through CPE](#)

Minimum english requirements

Students must meet the English proficiency requirements.

Why study Power Generation

- Designed by industry experts and specialist staff at three of Australia's premier universities
- Study in a number of locations and a variety of formats to enable you to work full time and access the professional development easily
- Enhance your technical competency; increase your knowledge and skill set within the power generation sector
- Tailored program taught by industry experts
- Build a career in the dynamic power generation industry
- Study individual units through [Continuing Professional Education](#).

Overview

Developed collaboratively by industry experts and specialist staff at three partner universities, the program is designed to meet the needs of the Australian power generation industry and its current and future workforce by capturing the knowledge and expertise of power generation engineers working in the power industry.

The program has been designed to enhance the technical competency of professional engineers and those working in Para-professional roles within the

power generation sector through professional development.

Graduates will gain skills and knowledge in a range of areas related to the design, construction, maintenance and management of power generation. The degree offers both theoretical understanding and practical applications of advanced professional practice.

To obtain a Graduate Certificate qualification, students must complete four units: Three core units and one elective unit. A minimum of two (2) units must be taken at QUT.

Students need to choose three (3) units from the following core unit list.

- Introduction to Power Plant (QUT)
- Asset Management Systems (CQU)
- Rotating Machinery (UQ)
- Project Delivery (QUT)
- Regulation, Compliance and Safety (UQ)

Students can then choose one elective from the following list:

- Applied Thermodynamics (QUT)
- Advanced Power Plant (CQU)
- Plant Control Systems (UQ)
- Power Plant Chemistry (CQU)
- Bulk Materials and Waste Products (CQU)
- Industrial Electrical Power Distribution (QUT)
- Plant Materials (CQU)
- Generator Technology Design and Application (UQ)
- Transformer Technology Design and Operation (UQ)
- Industrial Electrical Power Systems (QUT)
- Gas Plant and Systems (UQ)

For more information on any of the units from UQ or CQU visit the Power Generation Skills Development site.

Study mode

The Graduate Certificate in Engineering (Power Generation) is delivered in intensive learning sessions on campus and generator sites. Units are delivered in a variety of formats and locations to enable those working in full-time roles to access the professional development easily.

Further Information

Please visit [here](#) to find out how to apply and for further information

Sample Structure

Semesters

- [Power Generation Unit Options](#)
- [Advanced Power Generation Unit Options](#)

Code	Title
Course Notes	
Select one of:	
Introduction To Power Plant	
Project Delivery	
PLUS select one unit from the Advanced Power Generation Unit Options, or Power Generation Unit Options.	
You will be granted 24cp of advanced standing based on completion of approved units from UQ and CQU.	
Power Generation Unit Options	
EPG001	Introduction To Power Plant
EPG005	Project Delivery
Advanced Power Generation Unit Options	
EPG006	Applied Thermodynamics
Industrial Electrical Power Distribution	
EPG015	Industrial Electrical Power Systems

Handbook

Year	2013
QUT code	IT85
Duration (part-time)	1 year
Campus	Gardens Point
Domestic fee (indicative)	2013: \$7,800 per Semester
Total credit points	48
Credit points part-time sem.	24
Dom. Start Months	February, July
Course Coordinator	Dr Hasmukh Morarji
Discipline Coordinator	Science and Engineering Faculty 3138 8822 sef.enquiry@qut.edu.au

Domestic Entry requirements

To be eligible for this program, students must meet one of the following criteria:

- the Australian equivalent of a Bachelor's degree in any discipline with a grade point average of at least 4.5 (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

To be eligible for this program, students must meet one of the following criteria:

- the Australian equivalent of a Bachelor's degree in any discipline with a grade point average of at least 4.5 (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)	
speaking	6.0
writing	6.0
reading	6.0
listening	6.0
overall	6.5

Course Overview

Information technology is now firmly ensconced in society with all the other business practices that constitute modern organisations. This Graduate Certificate 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:

- No Major
- Digital Environments
- Enterprise Systems
- Executive Information Practice
- Games Design
- Games Production
- Information Management
- Library and Information Science
- Network Management
- Security
- Software Architecture

The Graduate Certificate in Information Technology IT85 is an entry point that is nested within the IT43 Masters and IT44 Masters Advanced programs. Students who successfully complete the IT85 course may articulate to IT43 Masters or IT44 Masters Advanced Programs.

The IT85 Graduate Certificate in Information Technology does not provide a pathway to follow on with a research degree. However, students who graduate from the IT85 Graduate Certificate in Information Technology may articulate to the IT43 Master of Information Technology or IT44 Master of Information Technology Advanced coursework programs.

Course Structure

Students are required to complete 48 credit points of units. Please refer to the course structures for information on specific unit requirements for each major. This course may be taken over two semesters part-time. However if the timetable permits a student may complete this course full time in one semester.

Course completion rules

Students should meet the following requirements before they are able to complete the Graduate Certificate program:

- Students are required to complete 48 credit points of units.
- Students must complete the specific unit requirements for a graduate certificate in a major.

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 GSB website](#) for further information.

Further Information

For further information about this course, please contact:

Dr Hasmukh Morarji
Phone: +61 7 3138 8822