University Diploma in Information Technology

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.
# Bachelor of Engineering (Civil)

<table>
<thead>
<tr>
<th>Handbook</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
<td>2013</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>QUT code</strong></td>
<td>CE44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>CRICOS</strong></td>
<td>037544G</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Duration (full-time)</strong></td>
<td>4 years</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Rank</strong></td>
<td>80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>OP Guarantee</strong></td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Campus</strong></td>
<td>Gardens Point</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total credit points</strong></td>
<td>384</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Credit points full-time sem.</strong></td>
<td>48</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Course Coordinator</strong></td>
<td>Professor Chris Eves</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Discipline Coordinator</strong></td>
<td>Dr Fiona Cheung</td>
<td><a href="mailto:sef.enquiry@qut.edu.au">sef.enquiry@qut.edu.au</a></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## Minimum English Requirements
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

## 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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=CE44&courseID=24302. CRICOS No. 00213J
Bachelor of Applied Science (Construction Management)

Minimum English Requirements
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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
Bachelor of Engineering (Electrical and Computer Engineering)

Handbook

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

Minimum english requirements
Students must meet the English proficiency requirements.

IELTS (International English Language Testing System)

<table>
<thead>
<tr>
<th>Skill</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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
# Bachelor of Engineering

## Handbook

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

## 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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
</tr>
<tr>
<td>writing</td>
</tr>
<tr>
<td>reading</td>
</tr>
<tr>
<td>listening</td>
</tr>
<tr>
<td>overall</td>
</tr>
</tbody>
</table>

## 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.

## Sample Structure

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB100</td>
<td>Engineering and Sustainability</td>
</tr>
<tr>
<td>ENB110</td>
<td>Engineering Statics and Materials</td>
</tr>
<tr>
<td>ENB130</td>
<td>Mechanical and Thermal Energy</td>
</tr>
<tr>
<td>MAB125</td>
<td>Foundations of Engineering Mathematics</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
</tr>
<tr>
<td>Year 1 - Semester 2</td>
<td></td>
</tr>
<tr>
<td>ENB120</td>
<td>Electrical Energy and Measurements</td>
</tr>
<tr>
<td>ENB150</td>
<td>Introducing Engineering Design</td>
</tr>
<tr>
<td>ENB200</td>
<td>Introducing Engineering Systems</td>
</tr>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MAB127</td>
<td>Mathematics for Engineering 2</td>
</tr>
</tbody>
</table>
Bachelor of Engineering (Aerospace Avionics)

**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>6.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**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
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**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB100</td>
<td>Engineering and Sustainability</td>
</tr>
<tr>
<td>ENB110</td>
<td>Engineering Statics and Materials</td>
</tr>
<tr>
<td>ENB130</td>
<td>Mechanical and Thermal Energy</td>
</tr>
<tr>
<td>MAB125</td>
<td>Foundations of Engineering Mathematics</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
</tr>
<tr>
<td>ENB120</td>
<td>Electrical Energy and Measurements</td>
</tr>
<tr>
<td>ENB150</td>
<td>Introducing Engineering Design</td>
</tr>
<tr>
<td>ENB200</td>
<td>Introducing Engineering Systems</td>
</tr>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MAB127</td>
<td>Mathematics for Engineering 2</td>
</tr>
<tr>
<td>ENB240</td>
<td>Introduction To Electronics</td>
</tr>
<tr>
<td>ENB246</td>
<td>Engineering Problem Solving</td>
</tr>
<tr>
<td>ENB250</td>
<td>Electrical Circuits</td>
</tr>
<tr>
<td>MAB127</td>
<td>Mathematics for Engineering 2</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
</tr>
</tbody>
</table>

Aerospace Avionics Selectives

<table>
<thead>
<tr>
<th>Enrolment Year</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 - Semester 1</td>
<td>ENB344</td>
<td>Industrial Electronics</td>
</tr>
<tr>
<td>Year 1 - Semester 2</td>
<td>ENB441</td>
<td>Applied Image Processing</td>
</tr>
<tr>
<td>Year 2 - Semester 1</td>
<td>ENB448</td>
<td>Signal Processing and Filtering</td>
</tr>
<tr>
<td>Year 2 - Semester 1</td>
<td>ENB457</td>
<td>Controls, Systems and Applications</td>
</tr>
<tr>
<td>Year 2 - Semester 2</td>
<td>INB270</td>
<td>Programming</td>
</tr>
<tr>
<td>Year 3 - Semester 1</td>
<td>ENB344</td>
<td>Industrial Electronics</td>
</tr>
<tr>
<td>Year 3 - Semester 2</td>
<td>ENB441</td>
<td>Applied Image Processing</td>
</tr>
<tr>
<td>Year 4 - Semester 1</td>
<td>ENB344</td>
<td>Industrial Electronics</td>
</tr>
<tr>
<td>Year 4 - Semester 2</td>
<td>ENB441</td>
<td>Applied Image Processing</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22210. CRICOS No.00213J
## Bachelor of Engineering (Civil and Construction)

### 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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>speaking</th>
<th>reading</th>
<th>writing</th>
<th>listening</th>
<th>overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>

### 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

### 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: 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. Explore theoretical aspects of geotechnical and materials engineering. Your theoretical understanding is reinforced by practical experience in our laboratories. Develop skills in construction administration and...
project management. Engineering statistics mathematical skills also help your understanding of all aspects of engineering design.

Year 3
Increase your knowledge and skills in geotechnical engineering, construction management, law and other related construction practices. Explore steel construction. Continue to develop communication and organisational skills by writing reports, presenting seminars and working in small groups. Choose a second study area.

Year 4
Build on your third year to complete your second study area. Undertake a major project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You also complete your work integrated learning.

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

Please refer to the rules before making your selection.

Electrical engineering second major and minor options

Second major:
- Civil Infrastructure

Minors:
- Civil and Construction Engineering minor
- 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

Seminars

Year 1
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
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
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

Year 4
Year 4 - Semester 1
- BEB801 Project 1
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB471</td>
<td>Design of Concrete Structures and Foundations</td>
</tr>
<tr>
<td>BEB701</td>
<td>Work Integrated Learning 1</td>
</tr>
<tr>
<td>ENB481</td>
<td>Civil Engineering Project Management</td>
</tr>
<tr>
<td>BEB802</td>
<td>Project 2</td>
</tr>
<tr>
<td>ENB477</td>
<td>Facade Engineering</td>
</tr>
<tr>
<td>ENB376</td>
<td>Transport Engineering</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22390. CRICOS No.00213J](http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22390. CRICOS No.00213J)
## Bachelor of Engineering (Civil and Environmental)

### 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.

---

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22370. CRICOS No.00213J
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.

Year 3
Increase your knowledge and skills in geotechnical and water engineering, and explore steel construction, highway and transport engineering. You are also introduced to environmental studies relating to population, resource management and environmental law. Continue to develop communication and organisational skills by writing reports, presenting seminars and working in small groups.

Year 4
Building on your third year by completing a major project which may be industry based will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You also complete work integrated learning. There are also additional electives to choose from.

Sample Structure Semesters

- **Year 1 - Semester 2**
- **Year 2 - Semester 1**
- **Year 2 - Semester 2**
- **Year 3 - Semester 1**
- **Civil and Environmental Engineering Selectives**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB100</td>
<td>Engineering and Sustainability</td>
</tr>
<tr>
<td>ENB110</td>
<td>Engineering Statics and Materials</td>
</tr>
<tr>
<td>ENB130</td>
<td>Mechanical and Thermal Energy</td>
</tr>
<tr>
<td>MAB125</td>
<td>Foundations of Engineering Mathematics</td>
</tr>
<tr>
<td>OR</td>
<td>MAB126 Mathematics for Engineering 1</td>
</tr>
<tr>
<td></td>
<td><strong>Year 1 - Semester 2</strong></td>
</tr>
<tr>
<td>ENB120</td>
<td>Electrical Energy and Measurements</td>
</tr>
<tr>
<td>ENB150</td>
<td>Introducing Engineering Design</td>
</tr>
<tr>
<td>ENB200</td>
<td>Introducing Engineering Systems</td>
</tr>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
</tr>
<tr>
<td>OR</td>
<td>MAB127 Mathematics for Engineering 2</td>
</tr>
<tr>
<td></td>
<td><strong>Year 2 - Semester 1</strong></td>
</tr>
<tr>
<td>ENB270</td>
<td>Engineering Mechanics of Materials</td>
</tr>
<tr>
<td>ENB272</td>
<td>Geotechnical Engineering 1</td>
</tr>
<tr>
<td>ENB273</td>
<td>Civil Materials</td>
</tr>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
</tr>
<tr>
<td></td>
<td><strong>Year 2 - Semester 2</strong></td>
</tr>
<tr>
<td>ENB274</td>
<td>Design of Environmentally Sustainable Systems</td>
</tr>
<tr>
<td>ENB275</td>
<td>Project Engineering 1</td>
</tr>
<tr>
<td>ENB276</td>
<td>Structural Engineering 1</td>
</tr>
<tr>
<td>ENB280</td>
<td>Hydraulic Engineering</td>
</tr>
<tr>
<td></td>
<td><strong>Year 3 - Semester 1</strong></td>
</tr>
<tr>
<td>ENB372</td>
<td>Design and Planning of Highways</td>
</tr>
<tr>
<td>ENB378</td>
<td>Water Engineering</td>
</tr>
<tr>
<td>ENB383</td>
<td>Environmental Resource Management</td>
</tr>
<tr>
<td>NQB302</td>
<td>Earth Surface Systems</td>
</tr>
<tr>
<td>OR</td>
<td>NQB314 Sedimentary Geology</td>
</tr>
</tbody>
</table>

- **Year 3 - Semester 2**
- **Selective**
- **Year 4 - Semester 1**
- **Selective**
- **Year 4 - Semester 2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB801</td>
<td>Project 1</td>
</tr>
<tr>
<td>PQB360</td>
<td>Global Energy Balance and Climate Change</td>
</tr>
<tr>
<td>UDB266</td>
<td>Planning Processes and Consultations</td>
</tr>
<tr>
<td></td>
<td><strong>Year 4 - Semester 2</strong></td>
</tr>
<tr>
<td>BEB701</td>
<td>Work Integrated Learning 1</td>
</tr>
<tr>
<td>ENB377</td>
<td>Water and Waste Water Treatment Engineering</td>
</tr>
<tr>
<td>NQB403</td>
<td>Soils and the Environment</td>
</tr>
<tr>
<td>OR</td>
<td>NQB614 Groundwater Systems</td>
</tr>
</tbody>
</table>
Bachelor of Engineering (Civil)

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22310. CRICOS No.00213J

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking 6.0</td>
</tr>
<tr>
<td>writing 6.0</td>
</tr>
<tr>
<td>reading 6.0</td>
</tr>
<tr>
<td>listening 6.0</td>
</tr>
<tr>
<td>overall 6.0</td>
</tr>
</tbody>
</table>

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

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

CIVIL ENGINEERING Second Major and Minor Options
Second Major: Structural Engineering Transport Engineering and Planning
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 (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.
Exploration of steel construction, highway and transport engineering. Further develop communication and organisational skills by writing reports, presenting seminars and working in small groups. Choose your second study area.

Year 4
Build on your third year to complete your second study area. Undertake a major project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You also complete work integrated learning.

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

Civil engineering second major and minor options
Second Major:
- Structural Engineering
- Transport Engineering and Planning

Minors:
- Civil Engineering minor
- A minor from anywhere in QUT that is outside of the course.

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

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

Your course
Year 1
Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2
Apply knowledge of fundamental engineering science in design areas of timber and concrete construction, and begin to explore theoretical aspects of geotechnical, fluids and sustainable engineering. Your theoretical understanding is reinforced by practical experience in our laboratories. Engineering statistics mathematical skills also help your understanding of all aspects of engineering design.

Year 3
Increase your knowledge and skills in geotechnical and water engineering. Explore steel construction, highway and transport engineering. Further develop communication and organisational skills by writing reports, presenting seminars and working in small groups. Choose your second study area.

Year 4
Build on your third year to complete your second study area. Undertake a major project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You also complete work integrated learning.

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

Please refer to the rules before making your selection.

Civil engineering second major and minor options
Second Major:
- Structural Engineering
- Transport Engineering and Planning

Minors:
- Civil Engineering minor
- A minor from anywhere in QUT that is outside of the course.

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

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

Your course
Year 1
Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2
Apply knowledge of fundamental engineering science in design areas of timber and concrete construction, and begin to explore theoretical aspects of geotechnical, fluids and sustainable engineering. Your theoretical understanding is reinforced by practical experience in our laboratories. Engineering statistics mathematical skills also help your understanding of all aspects of engineering design.

Year 3
Increase your knowledge and skills in geotechnical and water engineering. Explore steel construction, highway and transport engineering. Further develop communication and organisational skills by writing reports, presenting seminars and working in small groups. Choose your second study area.

Year 4
Build on your third year to complete your second study area. Undertake a major project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You also complete work integrated learning.

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

Please refer to the rules before making your selection.

Civil engineering second major and minor options
Second Major:
- Structural Engineering
- Transport Engineering and Planning

Minors:
- Civil Engineering minor
- 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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22310. CRICOS No.00213J

Bachelor of Engineering (Civil)

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

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

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB379</td>
<td>Transport Engineering and Planning Applications</td>
</tr>
<tr>
<td>ENB380</td>
<td>Environmental Law and Assessment</td>
</tr>
<tr>
<td>ENB383</td>
<td>Environmental Resource Management</td>
</tr>
<tr>
<td>ENB384</td>
<td>Design of Masonry Structures</td>
</tr>
<tr>
<td>ENB473</td>
<td>Design and Construction of Multi-storey Buildings</td>
</tr>
<tr>
<td>ENB474</td>
<td>Finite Element Methods</td>
</tr>
<tr>
<td>ENB475</td>
<td>Structural Engineering 3</td>
</tr>
<tr>
<td>ENB477</td>
<td>Facade Engineering</td>
</tr>
<tr>
<td>ENB478</td>
<td>Advanced Water Engineering</td>
</tr>
<tr>
<td>ENB481</td>
<td>Civil Engineering Project Management</td>
</tr>
<tr>
<td>ENB485</td>
<td>Advanced Geotechnical Engineering Practice</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22310. CRICOS No.00213J](http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22310. CRICOS No.00213J)
Bachelor of Engineering (Computer Systems)

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

Semester 2:
- INB381 Modelling and Animation Techniques
- INB272 Interaction Design
Bachelor of Engineering (Computer Systems)

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB374</td>
<td>Enterprise Software Architecture</td>
</tr>
<tr>
<td>INB382</td>
<td>Real Time Rendering Techniques</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22730. CRICOS No.00213J](http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22730. CRICOS No.00213J).
Bachelor of Engineering (Computer and Software Systems)

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
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

<table>
<thead>
<tr>
<th>Year 1 - Semester 1</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB100</td>
<td>Engineering and Sustainability</td>
</tr>
<tr>
<td>ENB110</td>
<td>Engineering Statics and Materials</td>
</tr>
<tr>
<td>ENB130</td>
<td>Mechanical and Thermal Energy</td>
</tr>
<tr>
<td>MAB125</td>
<td>Foundations of Engineering Mathematics</td>
</tr>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1 - Semester 2</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB120</td>
<td>Electrical Energy and Measurements</td>
</tr>
<tr>
<td>ENB150</td>
<td>Introducing Engineering Design</td>
</tr>
<tr>
<td>ENB200</td>
<td>Introducing Engineering Systems</td>
</tr>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
</tr>
<tr>
<td>MAB127</td>
<td>Mathematics for Engineering 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2 - Semester 1</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB240</td>
<td>Introduction To Electronics</td>
</tr>
<tr>
<td>ENB246</td>
<td>Engineering Problem Solving</td>
</tr>
<tr>
<td>ENB250</td>
<td>Electrical Circuits</td>
</tr>
<tr>
<td>MAB127</td>
<td>Mathematics for Engineering 2</td>
</tr>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2 - Semester 2</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB243</td>
<td>Linear Circuits and Systems</td>
</tr>
<tr>
<td>INB210</td>
<td>Databases</td>
</tr>
<tr>
<td>INB251</td>
<td>Networks</td>
</tr>
<tr>
<td>INB270</td>
<td>Programming</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3 - Semester 1</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB354</td>
<td>Introduction To Systems Design</td>
</tr>
<tr>
<td>INB301</td>
<td>The Business of IT</td>
</tr>
<tr>
<td>INB370</td>
<td>Software Development</td>
</tr>
<tr>
<td>INB371</td>
<td>Data Structures and Algorithms</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3 - Semester 2</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB244</td>
<td>Microprocessors and Digital Systems</td>
</tr>
<tr>
<td>ENB355</td>
<td>Advanced Systems Design</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4 - Semester 1</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB701</td>
<td>Work Integrated Learning 1</td>
</tr>
<tr>
<td>BEB802</td>
<td>Project 2</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Year 1 - Semester 1</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB100</td>
<td>Engineering and Sustainability</td>
</tr>
<tr>
<td>ENB110</td>
<td>Engineering Statics and Materials</td>
</tr>
<tr>
<td>ENB130</td>
<td>Mechanical and Thermal Energy</td>
</tr>
<tr>
<td>MAB125</td>
<td>Foundations of Engineering Mathematics</td>
</tr>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1 - Semester 2</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB120</td>
<td>Electrical Energy and Measurements</td>
</tr>
<tr>
<td>ENB150</td>
<td>Introducing Engineering Design</td>
</tr>
<tr>
<td>ENB200</td>
<td>Introducing Engineering Systems</td>
</tr>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
</tr>
<tr>
<td>MAB127</td>
<td>Mathematics for Engineering 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2 - Semester 1</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB240</td>
<td>Introduction To Electronics</td>
</tr>
<tr>
<td>ENB246</td>
<td>Engineering Problem Solving</td>
</tr>
<tr>
<td>ENB250</td>
<td>Electrical Circuits</td>
</tr>
<tr>
<td>MAB127</td>
<td>Mathematics for Engineering 2</td>
</tr>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2 - Semester 2</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB243</td>
<td>Linear Circuits and Systems</td>
</tr>
<tr>
<td>INB210</td>
<td>Databases</td>
</tr>
<tr>
<td>INB251</td>
<td>Networks</td>
</tr>
<tr>
<td>INB270</td>
<td>Programming</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3 - Semester 1</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB354</td>
<td>Introduction To Systems Design</td>
</tr>
<tr>
<td>INB301</td>
<td>The Business of IT</td>
</tr>
<tr>
<td>INB370</td>
<td>Software Development</td>
</tr>
<tr>
<td>INB371</td>
<td>Data Structures and Algorithms</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3 - Semester 2</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB244</td>
<td>Microprocessors and Digital Systems</td>
</tr>
<tr>
<td>ENB355</td>
<td>Advanced Systems Design</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4 - Semester 1</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB701</td>
<td>Work Integrated Learning 1</td>
</tr>
<tr>
<td>BEB802</td>
<td>Project 2</td>
</tr>
</tbody>
</table>

Any other unit approved by coordinator.
Bachelor of Engineering (Electrical)

**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
<th>Listening</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**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
- 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.

**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.
Bachelor of Engineering (Electrical)

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.

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

Please refer to the rules before making your selection.

Electrical engineering second major and minor options
Second major:
- Control Systems (previously Control and Manufacturing Engineering)
- Power and Energy Systems (previously Power Engineering)
- Signal Processing
- Telecommunications

Minors:
- Electrical Engineering minor
- A minor from anywhere in QUT that is outside of the course.

Please note: The Work Integrated Learning unit (BE8701) and the project unit (BE8801) 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
- A minor from anywhere in QUT that is outside of the course.

Please note: The Work Integrated Learning unit (BE8701) and the project unit (BE8801) 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
Seminesters

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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22750. CRICOS No.00213J
## 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

- **BEH701** 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
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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.0</td>
</tr>
</tbody>
</table>

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, instrumentisation and control, dynamics, thermodynamics and stress.
analysis. You continue to develop your communication skills by writing assignment reports and presenting seminars. You choose a second study area.

Year 4
In your final year you complete your second study area. You undertake a major project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You will also undertake your work integrated learning.

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

Please refer to the rules before making your selection.

Mechanical engineering second major and minor options
Second major:
- Motor Racing Engineering (previously Automotive Engineering)
- Engineering Management
- Heavy Mechanical Engineering

Minors:
- Mechanical Engineering minor plus
- A minor from anywhere in QUT that is outside of the course.

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

International Course structure

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

Your course

Year 1
Common first-year units include the foundations of engineering mathematics, basic principles of sustainability, electrical engineering, engineering mechanics, engineering design and engineering materials. These units provide a strong, fundamental overview of the three engineering streams: civil, electrical and mechanical.

Year 2
You build your knowledge of engineering science in areas such as fundamentals of design, dynamics, fluid mechanics, manufacturing and mathematics. You also gain practical experience in our laboratories and are introduced to computational fluid dynamics (CFD). Your communication skills will also be advanced with an introduction to engineering drawing and assignment report writing.

Year 3
You increase your knowledge and skills in a number of professional areas, including design, where you are introduced to solids modelling, materials and manufacture, instrumentation and control, dynamics, thermodynamics and stress analysis. You continue to develop your communication skills by writing assignment reports and presenting seminars. You choose a second study area.

Year 4
In your final year you complete your second study area. You undertake a major project which will bring together all your previously mastered skills, and advance your communication skills in report writing and seminar presentation. You will also undertake your work integrated learning.

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

Please refer to the rules before making your selection.

Mechanical engineering second major and minor options
Second major:
- Motor Racing Engineering (previously Automotive Engineering)
- Engineering Management
- Heavy Mechanical Engineering

Minors:
- Mechanical Engineering minor plus
- A minor from anywhere in QUT that is outside of the course.

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

Sample Structure

Seminesters

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

<table>
<thead>
<tr>
<th>Year 4 - Semester 1</th>
<th>Project 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB821</td>
<td>Thermodynamics 2</td>
</tr>
<tr>
<td>Second Major/Minor unit</td>
<td></td>
</tr>
<tr>
<td>Second Major/Minor unit</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4 - Semester 2</th>
<th>Project 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB701</td>
<td>Work Integrated Learning 1</td>
</tr>
<tr>
<td>BEB802</td>
<td>Thermodynamics 2</td>
</tr>
<tr>
<td>Second Major/Minor unit</td>
<td></td>
</tr>
<tr>
<td>Second Major/Minor unit</td>
<td></td>
</tr>
</tbody>
</table>

### Mechanical Engineering Selectives

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB314</td>
<td>Industrial Noise and Vibration</td>
</tr>
<tr>
<td>ENB333</td>
<td>Operations Management</td>
</tr>
<tr>
<td>ENB336</td>
<td>Industrial Engineering</td>
</tr>
<tr>
<td>ENB339</td>
<td>Introduction to Robotics</td>
</tr>
<tr>
<td>ENB422</td>
<td>Energy Management</td>
</tr>
<tr>
<td>ENB423</td>
<td>Heating, Ventilation and Air-Conditioning</td>
</tr>
<tr>
<td>ENB432</td>
<td>Engineering Asset Management and Maintenance</td>
</tr>
<tr>
<td>ENB433</td>
<td>Plant and Process Design</td>
</tr>
<tr>
<td>ENB434</td>
<td>Tribology</td>
</tr>
<tr>
<td>ENB435</td>
<td>Computer Integrated Manufacturing</td>
</tr>
<tr>
<td>ENB477</td>
<td>Facade Engineering</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22770. CRICOS No.00213J](http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22770. CRICOS No.00213J)
Bachelor of Engineering (Mechatronics)

Handbook

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

**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
</tr>
<tr>
<td>writing</td>
</tr>
<tr>
<td>reading</td>
</tr>
<tr>
<td>listening</td>
</tr>
<tr>
<td>overall</td>
</tr>
</tbody>
</table>

**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
- 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
  • 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
  • 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

Seminesters

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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22250. CRICOS No.00213J
### Bachelor of Engineering (Mechatronics)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB860</td>
<td>Computational Intelligence for Control and Embedded Systems</td>
</tr>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
</tbody>
</table>

**Selective**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB701</td>
<td>Work Integrated Learning 1</td>
</tr>
<tr>
<td>BEB801</td>
<td>Project 1</td>
</tr>
<tr>
<td>BEB802</td>
<td>Project 2</td>
</tr>
<tr>
<td>ENB333</td>
<td>Operations Management</td>
</tr>
</tbody>
</table>

### Year 4 - Semester 2

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB701</td>
<td>Work Integrated Learning 1</td>
</tr>
<tr>
<td>BEB801</td>
<td>Project 1</td>
</tr>
<tr>
<td>BEB802</td>
<td>Project 2</td>
</tr>
<tr>
<td>ENB333</td>
<td>Operations Management</td>
</tr>
<tr>
<td>ENB245</td>
<td>Introduction To Design and Professional Practice</td>
</tr>
<tr>
<td>ENB457</td>
<td>Controls, Systems and Applications</td>
</tr>
</tbody>
</table>

**Mechatronics Selectives**

OR any INB unit with permission from Coordinator.
Bachelor of Engineering (Medical)

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22270. CRICOS No.00213J

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...
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 biomedical engineering, 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**

**Seminars**
- **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**

**Code**

**Title**

<table>
<thead>
<tr>
<th>Year 1 - Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB100 Engineering and Sustainability</td>
</tr>
<tr>
<td>ENB110 Engineering Statics and Materials</td>
</tr>
<tr>
<td>ENB130 Mechanical and Thermal Energy</td>
</tr>
<tr>
<td>MAB125 Foundations of Engineering Mathematics</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>MAB126 Mathematics for Engineering 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1 - Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB120 Electrical Energy and Measurements</td>
</tr>
<tr>
<td>ENB150 Introducing Engineering Design</td>
</tr>
<tr>
<td>ENB200 Introducing Engineering Systems</td>
</tr>
<tr>
<td>MAB126 Mathematics for Engineering 1</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>MAB127 Mathematics for Engineering 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2 - Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB211 Dynamics</td>
</tr>
<tr>
<td>ENB212 Strength of Materials</td>
</tr>
<tr>
<td>LSB131 Anatomy</td>
</tr>
<tr>
<td>MAB127 Mathematics for Engineering 2</td>
</tr>
<tr>
<td>OR</td>
</tr>
<tr>
<td>MAB233 Engineering Mathematics 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2 - Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB205 Electrical and Computer Engineering</td>
</tr>
<tr>
<td>ENB215 Fundamentals of Mechanical Design</td>
</tr>
<tr>
<td>ENB221 Fluid Mechanics</td>
</tr>
<tr>
<td>LSB231 Physiology</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3 - Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB222 Thermodynamics 1</td>
</tr>
<tr>
<td>ENB231 Materials and Manufacturing 1</td>
</tr>
<tr>
<td>ENB311 Stress Analysis</td>
</tr>
<tr>
<td>ENB319 Biomechanical Engineering Design</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3 - Semester 2</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB313</td>
<td>Automatic Control</td>
<td></td>
</tr>
<tr>
<td>ENB318</td>
<td>Biomechanical Engineering Systems</td>
<td></td>
</tr>
<tr>
<td>ENB338</td>
<td>Biomaterials</td>
<td></td>
</tr>
<tr>
<td>ENB322</td>
<td>Biofluids</td>
<td></td>
</tr>
<tr>
<td>Year 4 - Semester 1</td>
<td>BEB801</td>
<td>Project 1</td>
</tr>
<tr>
<td>ENB335</td>
<td>Modelling and Simulation For Medical Engineers</td>
<td></td>
</tr>
<tr>
<td>ENB432</td>
<td>Engineering Asset Management and Maintenance</td>
<td></td>
</tr>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td>Selective</td>
<td></td>
</tr>
<tr>
<td>Year 4 - Semester 2</td>
<td>BEB701</td>
<td>Work Integrated Learning 1</td>
</tr>
<tr>
<td>BEB802</td>
<td>Project 2</td>
<td></td>
</tr>
<tr>
<td>ENB437</td>
<td>Health Legislation in the Medical Environment</td>
<td></td>
</tr>
<tr>
<td>PCB605</td>
<td>Biomedical Instrumentation</td>
<td></td>
</tr>
<tr>
<td>Medical Engineering Selectives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSS115</td>
<td>Management</td>
<td></td>
</tr>
<tr>
<td>MAB200</td>
<td>Computational Mathematics 1</td>
<td></td>
</tr>
<tr>
<td>MAB422</td>
<td>Mathematical Modelling</td>
<td></td>
</tr>
<tr>
<td>PCB593</td>
<td>Digital Image Processing</td>
<td></td>
</tr>
<tr>
<td>PCN112</td>
<td>Medical Imaging Science</td>
<td></td>
</tr>
<tr>
<td>PCN211</td>
<td>Physics of Medical Imaging</td>
<td></td>
</tr>
<tr>
<td>PYB100</td>
<td>Foundation Psychology</td>
<td></td>
</tr>
<tr>
<td>SCB384</td>
<td>Forensic Sciences - From Crime Scene to Court</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Engineering (Process Engineering)

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
</tr>
<tr>
<td>writing</td>
</tr>
<tr>
<td>reading</td>
</tr>
<tr>
<td>listening</td>
</tr>
<tr>
<td>overall</td>
</tr>
</tbody>
</table>

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)

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

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

<table>
<thead>
<tr>
<th>Semesters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 - Semester 1</td>
</tr>
<tr>
<td>Year 1 - Semester 2</td>
</tr>
<tr>
<td>Year 2 - Semester 1</td>
</tr>
<tr>
<td>Year 2 - Semester 2</td>
</tr>
<tr>
<td>Year 3 - Semester 1</td>
</tr>
<tr>
<td>Year 3 - Semester 2</td>
</tr>
<tr>
<td>Year 4 - Semester 1</td>
</tr>
<tr>
<td>Year 4 - Semester 2</td>
</tr>
</tbody>
</table>
# Bachelor of Engineering (Software Engineering)

## Software Engineering Selectives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB100</td>
<td>Engineering and Sustainability</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>ENB110</td>
<td>Engineering Statics and Materials</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>ENB120</td>
<td>Electrical Energy and Measurements</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>MAB125</td>
<td>Foundations of Engineering Mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OR**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Year 1 - Semester 2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB130</td>
<td>Mechanical and Thermal Energy</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>ENB150</td>
<td>Introducing Engineering Design</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>ENB200</td>
<td>Introducing Engineering Systems</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAB127</td>
<td>Mathematics for Engineering 2</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OR**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAB127</td>
<td>Mathematics for Engineering 2</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>

**Year 2 - Semester 1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB240</td>
<td>Introduction To Electronics</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>ENB246</td>
<td>Engineering Problem Solving</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>ENB250</td>
<td>Electrical Circuits</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>MAB127</td>
<td>Mathematics for Engineering 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OR**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

**Year 2 - Semester 2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB243</td>
<td>Linear Circuits and Systems</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>INB210</td>
<td>Databases</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>INB251</td>
<td>Networks</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>INB270</td>
<td>Programming</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Year 3 - Semester 1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB354</td>
<td>Introduction To Systems Design</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>INB301</td>
<td>The Business of IT</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>INB370</td>
<td>Software Development</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>INB371</td>
<td>Data Structures and Algorithms</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Year 3 - Semester 2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB244</td>
<td>Microprocessors and Digital Systems</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>ENB355</td>
<td>Advanced Systems Design</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>INB365</td>
<td>Systems Programming</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAB255</td>
<td>Security</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OR**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAB255</td>
<td>Security</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

**Selective**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB801</td>
<td>Project 1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>INB309-1</td>
<td>Major Project</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INB350</td>
<td>Real-time Computer-based Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INB255</td>
<td>Security</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Year 4 - Semester 1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB701</td>
<td>Work Integrated Learning 1</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>BEB802</td>
<td>Project 2</td>
<td>4</td>
<td>1</td>
</tr>
</tbody>
</table>

**OR**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB309-2</td>
<td>Major Project</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INB272</td>
<td>Interaction Design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INB372</td>
<td>Agile Software Development</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Selective**

**Year 4 - Semester 2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB242</td>
<td>Introduction To Telecommunications</td>
<td>4</td>
<td>2</td>
</tr>
</tbody>
</table>

**Software Engineering Selectives**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year</th>
<th>Semester</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB344</td>
<td>Industrial Electronics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENB352</td>
<td>Communication Environments For Embedded Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INB340</td>
<td>Database Design</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INB355</td>
<td>Cryptology and Protocols</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INB373</td>
<td>Web Application Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INB374</td>
<td>Enterprise Software Architecture</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INB381</td>
<td>Modelling and Animation Techniques</td>
<td></td>
<td></td>
</tr>
<tr>
<td>INB382</td>
<td>Real Time Rendering Techniques</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Any other unit approved by coordinator.

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22870](http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22870). CRICOS No. 00213J.
### Bachelor of Engineering (Telecommunications)

**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>speaking</th>
<th>writing</th>
<th>reading</th>
<th>listening</th>
<th>overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**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**
  - Introducing Professional Learning
  - Engineering Mechanics 1
  - Engineering Materials

- **Year 1 - Semester 2**
  - Introducing Sustainability
  - Electrical Engineering
  - Engineering Mathematics 2A
  - OR
  - Engineering Mathematics 2B

- **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
  - BEB345 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**

---

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22211. CRICOS No.00213](http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22211. CRICOS No.00213)
### Bachelor of Engineering (Telecommunications)

<table>
<thead>
<tr>
<th>Code</th>
<th>Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB802</td>
<td>Project 2</td>
</tr>
<tr>
<td>ENB446</td>
<td>Wireless Communications</td>
</tr>
<tr>
<td>ENB448</td>
<td>Signal Processing and Filtering</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22211](http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22211). CRICOS No.00213J
Bachelor of Engineering - Dean's Scholars Program

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 (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.

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.0</td>
</tr>
</tbody>
</table>

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 with 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)
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**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB100</td>
<td>Engineering and Sustainability</td>
</tr>
<tr>
<td>ENB110</td>
<td>Engineering Statics and Materials</td>
</tr>
<tr>
<td>ENB130</td>
<td>Mechanical and Thermal Energy</td>
</tr>
<tr>
<td>MAB125</td>
<td>Foundations of Engineering Mathematics</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
</tr>
<tr>
<td>ENB120</td>
<td>Electrical Energy and Measurements</td>
</tr>
<tr>
<td>ENB150</td>
<td>Introducing Engineering Design</td>
</tr>
<tr>
<td>ENB200</td>
<td>Introducing Engineering Systems</td>
</tr>
<tr>
<td>MAB126</td>
<td>Mathematics for Engineering 1</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MAB127</td>
<td>Mathematics for Engineering 2</td>
</tr>
<tr>
<td>ENB240</td>
<td>Introduction To Electronics</td>
</tr>
<tr>
<td>ENB246</td>
<td>Engineering Problem Solving</td>
</tr>
<tr>
<td>ENB250</td>
<td>Electrical Circuits</td>
</tr>
<tr>
<td>MAB127</td>
<td>Mathematics for Engineering 2</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
</tr>
<tr>
<td>ENB121</td>
<td>Aerodynamics</td>
</tr>
<tr>
<td>ENB242</td>
<td>Introduction To Telecommunications</td>
</tr>
</tbody>
</table>

### Code

- ENB243 Linear Circuits and Systems
- ENB244 Microprocessors and Digital Systems
- ENB241 Software Systems Design
- ENB342 Signals, Systems and Transforms
- ENB348 Aircraft Systems and Flight Control
- ENB354 Introduction To Systems Design
- ENB343 Fields, Transmission and Propagation
- ENB347 Modern Flight Control Systems
- ENB355 Advanced Systems Design
- MAB233 Engineering Mathematics 3

**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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=EN40&courseID=22830. CRICOS No.00213J
Bachelor of Games and Interactive Entertainment

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
</tr>
<tr>
<td>writing</td>
</tr>
<tr>
<td>reading</td>
</tr>
<tr>
<td>listening</td>
</tr>
<tr>
<td>overall</td>
</tr>
</tbody>
</table>

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 Enerex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNTAB, 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.

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
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**

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB180</td>
<td>Computer Games Studies</td>
</tr>
<tr>
<td>INB104</td>
<td>Building IT Systems</td>
</tr>
<tr>
<td>INB103</td>
<td>Industry Insights</td>
</tr>
<tr>
<td>IFB103</td>
<td>Design IT</td>
</tr>
<tr>
<td>Year 1, Semester 1</td>
<td></td>
</tr>
<tr>
<td>INB181</td>
<td>Introduction to Games Production</td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Year 1, Semester 2</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Year 2, Semester 1</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Year 3, Semester 1</td>
<td></td>
</tr>
<tr>
<td>INB379</td>
<td>Game Project Design</td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Year 3, Semester 2</td>
<td></td>
</tr>
<tr>
<td>INB380</td>
<td>Games Project</td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Block B or Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Note: Coop Ed students replace INB380 with INS011 and INS012</td>
<td></td>
</tr>
</tbody>
</table>
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 (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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>speaking</th>
<th>writing</th>
<th>reading</th>
<th>listening</th>
<th>overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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

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

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
</table>

Refer to IT04 course structure.

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IT04&courseID=22970. CRICOS No.00213J.
**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

**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:
- Business Analysis
- Technology Management
- Organisational Databases

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 Energeq, 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:
- 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 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

<table>
<thead>
<tr>
<th>Course Structure 2011 onwards</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 1</td>
</tr>
<tr>
<td>INB103 Industry Insights</td>
</tr>
<tr>
<td>INB120 Corporate Systems</td>
</tr>
<tr>
<td>INB101 Impact of IT</td>
</tr>
<tr>
<td>INB122 Organisational Databases</td>
</tr>
</tbody>
</table>

| Year 1, Semester 2            |
| BSB115 Management            |
| INB123 Project Management Practice |
| INB124 Information Systems Development |

| Year 2, Semester 2            |
| BSB126 Marketing              |
| BSB128 Marketing              |
| Year 3, Semester 1            |
| MGB223 Technology Management  |
| INB312 Enterprise Systems Applications |
| INB322 Information Systems Consulting |

| Year 3, Semester 2            |
| BSB120 Business Analysis      |
| INB325 Corporate Systems Management Project |

<table>
<thead>
<tr>
<th>Block B: Complimentary Studies</th>
</tr>
</thead>
</table>

For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=IT06&courseID=23031. CRICOS No.00213J](http://www.student.qut.edu.au/studying/courses/course?courseCode=IT06&courseID=23031. CRICOS No.00213J)
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EFB307</td>
<td>Finance 2</td>
</tr>
<tr>
<td>EFB312</td>
<td>International Finance</td>
</tr>
<tr>
<td>KTB104</td>
<td>Performance Innovation</td>
</tr>
<tr>
<td>KTB207</td>
<td>Staging Australia</td>
</tr>
<tr>
<td>KTB210</td>
<td>Creative Industries Management</td>
</tr>
<tr>
<td>KTB211</td>
<td>Creative Industries Events and Festivals</td>
</tr>
<tr>
<td>UDB101</td>
<td>Stewardship of Land</td>
</tr>
<tr>
<td>UDB104</td>
<td>Urban Development Economics</td>
</tr>
<tr>
<td>UDB110</td>
<td>Residential Construction and Engineering</td>
</tr>
<tr>
<td>UDB111</td>
<td>Engineering Construction Materials</td>
</tr>
<tr>
<td>MGB200</td>
<td>Leading Organisations</td>
</tr>
<tr>
<td>MGB201</td>
<td>Contemporary Employment Relations</td>
</tr>
<tr>
<td>MGB207</td>
<td>Human Resource Issues and Strategy</td>
</tr>
<tr>
<td>MGB314</td>
<td>Organisational Consulting and Change</td>
</tr>
<tr>
<td>MGB320</td>
<td>Recruitment and Selection</td>
</tr>
<tr>
<td>MGB331</td>
<td>Learning and Development in Organisations</td>
</tr>
<tr>
<td>MGB339</td>
<td>Performance and Reward</td>
</tr>
<tr>
<td>MGB370</td>
<td>Personal and Professional Development</td>
</tr>
<tr>
<td>LWB136</td>
<td>Contracts A</td>
</tr>
<tr>
<td>LWB137</td>
<td>Contracts B</td>
</tr>
<tr>
<td>LWB145</td>
<td>Legal Foundations A</td>
</tr>
<tr>
<td>LWB146</td>
<td>Legal Foundations B</td>
</tr>
<tr>
<td>LWB238</td>
<td>Fundamentals of Criminal Law</td>
</tr>
<tr>
<td>LWB241</td>
<td>Trusts</td>
</tr>
<tr>
<td>LWB242</td>
<td>Constitutional Law</td>
</tr>
<tr>
<td>LWB334</td>
<td>Corporate Law</td>
</tr>
<tr>
<td>BSB111</td>
<td>Business Law and Ethics</td>
</tr>
<tr>
<td>BSB113</td>
<td>Economics</td>
</tr>
<tr>
<td>BSB119</td>
<td>Global Business</td>
</tr>
<tr>
<td>BSB124</td>
<td>Working in Business</td>
</tr>
<tr>
<td>MGB200</td>
<td>Leading Organisations</td>
</tr>
<tr>
<td>MGB210</td>
<td>Managing Operations</td>
</tr>
<tr>
<td>MGB309</td>
<td>Strategic Management</td>
</tr>
<tr>
<td>MGB324</td>
<td>Managing Business Growth</td>
</tr>
<tr>
<td>AMB200</td>
<td>Consumer Behaviour</td>
</tr>
<tr>
<td>AMB201</td>
<td>Marketing and Audience Research</td>
</tr>
<tr>
<td>AMB240</td>
<td>Marketing Planning and Management</td>
</tr>
<tr>
<td>AMB335</td>
<td>E-marketing Strategies</td>
</tr>
<tr>
<td>AMB359</td>
<td>Strategic Marketing</td>
</tr>
<tr>
<td>PYB007</td>
<td>Interpersonal Processes and Skills</td>
</tr>
<tr>
<td>PYB100</td>
<td>Foundation Psychology</td>
</tr>
<tr>
<td>PYB202</td>
<td>Social and Organisational Psychology</td>
</tr>
<tr>
<td>PYB302</td>
<td>Industrial and Organisational Psychology</td>
</tr>
<tr>
<td>PUB326</td>
<td>Epidemiology</td>
</tr>
<tr>
<td>PUB332</td>
<td>Sustainable Environments For Health</td>
</tr>
<tr>
<td>PUB406</td>
<td>Health Promotion Practice</td>
</tr>
<tr>
<td>JSB170</td>
<td>Introduction to Criminology and Policing</td>
</tr>
<tr>
<td>JSB171</td>
<td>Justice and Society</td>
</tr>
<tr>
<td>JSB272</td>
<td>Theories of Crime</td>
</tr>
<tr>
<td>JSB273</td>
<td>Crime Research Methods</td>
</tr>
<tr>
<td>JSB372</td>
<td>Youth Justice</td>
</tr>
<tr>
<td>JSB374</td>
<td>Crime Prevention</td>
</tr>
<tr>
<td>INB104</td>
<td>Building IT Systems</td>
</tr>
<tr>
<td>INB120</td>
<td>Corporate Systems</td>
</tr>
<tr>
<td>INB220</td>
<td>Business Analysis</td>
</tr>
<tr>
<td>INB255</td>
<td>Security</td>
</tr>
<tr>
<td>INB272</td>
<td>Interaction Design</td>
</tr>
<tr>
<td>INB300</td>
<td>Or, an INB300 level unit as approved by the course coordinator</td>
</tr>
</tbody>
</table>

The information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=IT06&courseID=23031](http://www.student.qut.edu.au/studying/courses/course?courseCode=IT06&courseID=23031). CRICOS No.00213J
**Domestic Entry requirements**

**2013 questionnaires have closed**

Questionnaires for the 2013 intake were due to be 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 (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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

**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

**Closing date**

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

**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**
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 Assistant 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 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 a new mobile software, a new way to conduct business over the net, or even how a business could out-maneuvre 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.
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 EnergeyX, Boeing, CITEC, CSQ 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 BGSIE 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](http://www.student.qut.edu.au/studying/courses/course?courseCode=IT06&courseID=23050. CRICOS No.00213J).

**Unit Incompatibility/Translation Information**

Details on the translation and incompatibility of old and new units is located here: [Undergraduate Translation Table](http://www.student.qut.edu.au/studying/courses/course?courseCode=IT06&courseID=23050. CRICOS No.00213J).

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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Course Notes</td>
</tr>
</tbody>
</table>
Handbook

Bachelor of Information Technology

Minimum English Requirements
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>6.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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 Co-operative 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 Co-operative 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.
Minimum English Requirements
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
<th>Listening</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Semesters</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Year 1, Semester 1</td>
</tr>
<tr>
<td>INB104 Building IT Systems</td>
</tr>
<tr>
<td>INB103 Industry Insights</td>
</tr>
<tr>
<td>INB210 Databases</td>
</tr>
<tr>
<td>INB250 Foundations of Computer Science</td>
</tr>
<tr>
<td>Year 1, Semester 2</td>
</tr>
<tr>
<td>INB270 Programming</td>
</tr>
<tr>
<td>INB251 Networks</td>
</tr>
<tr>
<td>INB271 The Web</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Block B or Block C Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB301</td>
<td>The Business of IT</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Block B or Block C Unit</td>
</tr>
</tbody>
</table>

**Year 3, Semester 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Block B or Block C Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB302</td>
<td>IT Capstone Project</td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Block B or Block C Unit</td>
</tr>
</tbody>
</table>

**Year 3, Semester 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Block B or Block C Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Block B or Block C Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Block B or Block C Unit</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=IT22&courseID=23790](http://www.student.qut.edu.au/studying/courses/course?courseCode=IT22&courseID=23790). CRICOS No.00213J
Bachelor of Information Technology - Dean's Scholars Program

**Minimum english requirements**
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
<th>Listening</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

**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
- 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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Progression</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB270</td>
<td>Programming</td>
<td>Year 1, Semester 2</td>
</tr>
<tr>
<td>INB251</td>
<td>Networks</td>
<td>Year 2, Semester 1</td>
</tr>
<tr>
<td>INB271</td>
<td>The Web</td>
<td>Year 2, Semester 1</td>
</tr>
<tr>
<td></td>
<td>Intermediate Level Elective</td>
<td>Year 2, Semester 2</td>
</tr>
<tr>
<td>INB301</td>
<td>The Business of IT</td>
<td>Year 2, Summer</td>
</tr>
<tr>
<td>INB302</td>
<td>IT Capstone Project</td>
<td>Year 3, Semester 1</td>
</tr>
</tbody>
</table>

**Contact Information**

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

---

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IT22&courseID=23851. CRICOS No.00213J.
Bachelor of Information Technology - Dean's Scholars Program

<table>
<thead>
<tr>
<th>Year 3, Semester 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Block B or Block C Unit</td>
<td></td>
</tr>
<tr>
<td>INN Unit</td>
<td></td>
</tr>
<tr>
<td>INN Elective</td>
<td></td>
</tr>
<tr>
<td>INN700 Introduction To Research</td>
<td></td>
</tr>
<tr>
<td>INN Elective</td>
<td></td>
</tr>
<tr>
<td>INN401 Honours Dissertation 1</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3, Summer</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>INN402 Honours Dissertation 2</td>
<td></td>
</tr>
<tr>
<td>INN403 Honours Dissertation 3</td>
<td></td>
</tr>
<tr>
<td>INN404 Honours Dissertation 4</td>
<td></td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IT22&courseID=23851. CRICOS No.00213j
Bachelor of Information Technology

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

- English

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

<table>
<thead>
<tr>
<th>speaking</th>
<th>writing</th>
<th>reading</th>
<th>listening</th>
<th>overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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.
Bachelor of Information Technology

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
Bachelor of Information Technology

education program and its mentoring and assessment requirements make up the required contact and assessment components of both units. Eligibility criteria apply. International students are not eligible due to visa restrictions. International students wishing to undertake a similar program should consider applying to take part in a 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 8622
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, iPads 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**

**Seminesters**

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB101</td>
<td>Impact of IT</td>
</tr>
<tr>
<td>INB102</td>
<td>Emerging Technology</td>
</tr>
<tr>
<td>INB103</td>
<td>Industry Insights</td>
</tr>
<tr>
<td>INB104</td>
<td>Building IT Systems</td>
</tr>
<tr>
<td></td>
<td><strong>Year 1, Semester 2</strong></td>
</tr>
<tr>
<td></td>
<td>IT Breadth Option Unit</td>
</tr>
<tr>
<td></td>
<td>IT Breadth Option Unit</td>
</tr>
<tr>
<td></td>
<td>IT Breadth Option Unit</td>
</tr>
<tr>
<td></td>
<td>Complementary Studies Unit</td>
</tr>
<tr>
<td></td>
<td><strong>Year 2, Semester 1</strong></td>
</tr>
<tr>
<td></td>
<td>INB201 Scalable Systems Development</td>
</tr>
<tr>
<td></td>
<td>[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.]</td>
</tr>
<tr>
<td></td>
<td>IT Breadth Option Unit</td>
</tr>
<tr>
<td></td>
<td>IT Specialisation Option Unit</td>
</tr>
<tr>
<td></td>
<td>Complementary Studies Unit</td>
</tr>
<tr>
<td></td>
<td><strong>Year 2, Semester 2</strong></td>
</tr>
<tr>
<td></td>
<td>IT Specialisation Option Unit</td>
</tr>
<tr>
<td></td>
<td>Complementary Studies Unit</td>
</tr>
<tr>
<td></td>
<td>Complementary Studies Unit</td>
</tr>
<tr>
<td></td>
<td><strong>Year 3, Semester 1</strong></td>
</tr>
<tr>
<td></td>
<td>INB300 Professional Practice in IT</td>
</tr>
<tr>
<td></td>
<td>INB301 The Business of IT</td>
</tr>
<tr>
<td></td>
<td>[Note: INB300 and INB301 can only be taken after you have completed a minimum of 168 credit points of study.]</td>
</tr>
<tr>
<td></td>
<td>IT Specialisation Option Unit</td>
</tr>
<tr>
<td></td>
<td>Complementary Studies Unit</td>
</tr>
<tr>
<td></td>
<td><strong>Year 3, Semester 2</strong></td>
</tr>
<tr>
<td></td>
<td>INB302 IT Capstone Project</td>
</tr>
<tr>
<td></td>
<td>[Note: INB301 must be completed before enrolling in INB302.]</td>
</tr>
<tr>
<td></td>
<td>IT Specialisation Option Unit</td>
</tr>
<tr>
<td></td>
<td>Complementary Studies Unit</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/study/degrees/courses/coursesCode=f236courseID=e23310. CRCOS No.00213)
Bachelor of Information Technology - Dean's Scholars Program

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.

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>speaking</th>
<th>writing</th>
<th>reading</th>
<th>listening</th>
<th>overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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 (QUSIC), 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: 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:
- 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.

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Refer to IT23 course structure.
# Bachelor of Engineering (Software Engineering)

**Handbook**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
<td>2013</td>
</tr>
<tr>
<td><strong>QUT code</strong></td>
<td>IX25</td>
</tr>
<tr>
<td><strong>Duration</strong></td>
<td>4 years</td>
</tr>
<tr>
<td><strong>OP</strong></td>
<td>12</td>
</tr>
<tr>
<td><strong>Rank</strong></td>
<td>76</td>
</tr>
<tr>
<td><strong>OP Guarantee</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Campus</strong></td>
<td>Gardens Point</td>
</tr>
<tr>
<td><strong>Total credit points</strong></td>
<td>384</td>
</tr>
<tr>
<td><strong>Credit points full-time sem.</strong></td>
<td>48</td>
</tr>
<tr>
<td><strong>Start months</strong></td>
<td>February</td>
</tr>
<tr>
<td><strong>Int. Start Months</strong></td>
<td>February</td>
</tr>
<tr>
<td><strong>Course Coordinator</strong></td>
<td>Dr R.Mahalinga-Iyer</td>
</tr>
<tr>
<td><strong>Discipline Coordinator</strong></td>
<td>Dr Wayne Kelly</td>
</tr>
</tbody>
</table>

## Minimum English Requirements

Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

## 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
Minimum English Requirements

Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
</tr>
<tr>
<td>writing</td>
</tr>
<tr>
<td>reading</td>
</tr>
<tr>
<td>listening</td>
</tr>
<tr>
<td>overall</td>
</tr>
</tbody>
</table>

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**

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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit
http://www.student.qut.edu.au/studying/courses/course?courseId=45506&courseId=22851. CRICOS No.00213J
<table>
<thead>
<tr>
<th>Year 4, Semester 1</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LQB584</td>
<td>Medical Cell Biology</td>
<td></td>
</tr>
<tr>
<td>LQB585</td>
<td>Plant Genetic Manipulation</td>
<td></td>
</tr>
<tr>
<td>LSB709-1</td>
<td>Biotechnology Research Project</td>
<td></td>
</tr>
<tr>
<td>MGB225</td>
<td>Intercultural Communication and Negotiation Skills</td>
<td></td>
</tr>
<tr>
<td>Year 4, Semester 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSB709-2</td>
<td>Biotechnology Research Project</td>
<td></td>
</tr>
<tr>
<td>LSB709-3</td>
<td>Biotechnology Research Project</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plus any TWO of the following three units:</td>
<td></td>
</tr>
<tr>
<td>LQB684</td>
<td>Medical Biotechnology</td>
<td></td>
</tr>
<tr>
<td>LQB685</td>
<td>Plant Microbe Interactions</td>
<td></td>
</tr>
<tr>
<td>MGB309</td>
<td>Strategic Management</td>
<td></td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=LS50&courseID=22851. CRICOS No.00213J
Bachelor of Mathematics

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
- 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

Seminesters

Level 1 Mathematics Units
- MAB101 Statistical Data Analysis
- 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
- MAB220 Computational Mathematics

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.
Bachelor of Mathematics - Dean’s Scholars Program

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

Handbook

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUT code</td>
<td>MA54 + SC60</td>
</tr>
<tr>
<td>Duration (full-time)</td>
<td>3 years</td>
</tr>
<tr>
<td>OP</td>
<td>1</td>
</tr>
<tr>
<td>Rank</td>
<td>99</td>
</tr>
<tr>
<td>Campus</td>
<td>Gardens Point</td>
</tr>
<tr>
<td>Domestic fee (indicative)</td>
<td>2013: CSP $4200 per Semester (48 credit points)</td>
</tr>
<tr>
<td>Total credit points</td>
<td>384 (BMaths 288 cp and BAppSc(Hons) 96cp)</td>
</tr>
<tr>
<td>Credit points full-time sem.</td>
<td>48</td>
</tr>
<tr>
<td>Start months</td>
<td>February</td>
</tr>
<tr>
<td>Int. Start Months</td>
<td>February</td>
</tr>
<tr>
<td>Course Coordinator</td>
<td>Mr Richard Thomas</td>
</tr>
<tr>
<td>Discipline Coordinator</td>
<td>A/Prof Dann Mallet 07 3138 2354 <a href="mailto:dg.mallet@qut.edu.au">dg.mallet@qut.edu.au</a></td>
</tr>
</tbody>
</table>

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.

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.

IETLS (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:**

<table>
<thead>
<tr>
<th>Year 1, Semester 1 (48 cp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal BMaths and BAppSc(Hons) units: BMaths Coursework (48 cp)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2 (48 cp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean's Scholars Program enrichment unit: SCB303 Tutorial Program for Dean's Scholars</td>
</tr>
<tr>
<td>Normal BMaths and BAppSc(Hons) units: BMaths Coursework (36 cp)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2, Semester 1 (48 cp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean's Scholars Program enrichment unit: SCB401 Research Methods for Dean's Scholars</td>
</tr>
<tr>
<td>Or other approved unit</td>
</tr>
<tr>
<td>Normal BMaths and BAppSc(Hons) units: BMaths Coursework (36 cp)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2, Semester 2 (48 cp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal BMaths and BAppSc(Hons) units: BMaths Coursework (48 cp)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3, Semester 1 (48 cp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean's Scholars Program enrichment unit: SCB501-1 Research Project for Dean's Scholars</td>
</tr>
<tr>
<td>Normal BMaths and BAppSc(Hons) units: BAppSc Coursework (36 cp)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3, Semester 2 (48 cp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dean's Scholars Program enrichment unit: SCB501-2 Research Project for Dean's Scholars</td>
</tr>
<tr>
<td>Normal BMaths and BAppSc(Hons) units: BMaths Coursework (36 cp)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4, Semester 1 (48 cp) and Semester 2 (48 cp)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal BMaths and BAppSc(Hons) units: BAppSc(Hons) Coursework/Research (48 cp)</td>
</tr>
<tr>
<td>Normal BMaths and BAppSc(Hons) units: BAppSc(Hons) Coursework/Research (48 cp)</td>
</tr>
</tbody>
</table>

**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.
## Bachelor of Engineering (Mechanical)

### Handbook

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

### Minimum English Requirements

Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

### 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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=ME41&courseID=22850](http://www.student.qut.edu.au/studying/courses/course?courseCode=ME41&courseID=22850). CRICOS No. 00213J
Bachelor of Applied Science

<table>
<thead>
<tr>
<th>Handbook</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
</tr>
<tr>
<td><strong>QUT code</strong></td>
</tr>
<tr>
<td><strong>CRICOS</strong></td>
</tr>
<tr>
<td><strong>Duration (full-time)</strong></td>
</tr>
<tr>
<td><strong>Duration (part-time domestic)</strong></td>
</tr>
<tr>
<td><strong>Rank</strong></td>
</tr>
<tr>
<td><strong>OP Guarantee</strong></td>
</tr>
<tr>
<td><strong>Campus</strong></td>
</tr>
<tr>
<td><strong>Domestic fee (indicative)</strong></td>
</tr>
<tr>
<td><strong>International fee (indicative)</strong></td>
</tr>
<tr>
<td><strong>Total credit points</strong></td>
</tr>
<tr>
<td><strong>Credit points full-time sem.</strong></td>
</tr>
<tr>
<td><strong>Credit points part-time sem.</strong></td>
</tr>
<tr>
<td><strong>Start months</strong></td>
</tr>
<tr>
<td><strong>Int. Start Months</strong></td>
</tr>
<tr>
<td><strong>Deferment</strong></td>
</tr>
<tr>
<td><strong>Course Coordinator</strong></td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

**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:

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=SC01&courseId=22530. CRICOS No.00213J
Bachelor of Applied Science (Biochemistry)

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

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.](mailto:sef.enquiry@qut.edu.au)

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

**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.
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**
- **Recommended Second Majors:**
- * Elective Unit for all Majors except Forensic Science:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB110</td>
<td>Science Concepts and Global Systems</td>
</tr>
<tr>
<td>OR (after 2012)</td>
<td></td>
</tr>
<tr>
<td>SCB11</td>
<td>Selective*</td>
</tr>
<tr>
<td>SCB111</td>
<td>Chemistry 1</td>
</tr>
<tr>
<td>OR (after Semester 1 2013)</td>
<td></td>
</tr>
<tr>
<td>CVB101</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>SCB150</td>
<td>Physical Science Applications</td>
</tr>
</tbody>
</table>

*See “Science Selective Units” options on e-Student or refer to list at the bottom of the page.*

| SCB112 | Chemistry 2                                                         |
| OR (after Semester 1 2013) |

| SCB121 | Chemical Structure and Reactivity                                   |
| OR (after 2012) |
| CVB102 | Cell and Molecular Biology                                         |

| SCB123 | Human Health & Disease Concepts                                    |
| OR (after 2012) |

| SCB124 | Human Anatomy and Physiology                                       |
| OR (after 2012) |
| LSB142 | [Please note LSB142 is only offered in semester 1.]               |

| SCB125 | Experimental Chemistry                                             |
| OR (after 2012) |

| SCB126 | Biomedical Physics                                                 |
| OR (after 2012) |

| SCB127 | Biochemistry: Structure and Function                               |
| OR (after 2012) |

| SCB128 | Plus TWO other units selected according to the second major requirements |

| SCB129 | Biochemical Pathways and Metabolism                                |
| OR (after 2012) |

| SCB130 | Molecular Biology Techniques                                       |
| OR (after 2012) |

| SCB131 | Plus TWO other units selected according to the second major requirements |

| SCB132 | Functional Biochemistry                                           |
| OR (after 2012) |

| SCB133 | Biomedical Research Technologies                                    |
| OR (after 2012) |

| SCB134 | Plus TWO other units selected according to the second major requirements |

| SCB135 | Biochemical Research Skills                                        |
| OR (after 2012) |

| SCB136 | Protein Biochemistry and Bioengineering                            |
| OR (after 2012) |

| SCB137 | Plus TWO other units selected according to the second major requirements |

| SCB138 | Recommended Second Majors:                                         |
| OR (after 2012) |

| SCB139 | Biotechnology, Chemistry, Forensic Science, Life Science Technologies, Microbiology |
| OR (after 2012) |

| SCB140 | * Elective Unit for all Majors except Forensic Science:              |
| OR (after 2012) |

| SCB141 | SCB500 Industry Project                                             |

1. Students without a Sound Achievement 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.
Handbook

Bachelor of Applied Science (Biotechnology)

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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB110</td>
<td>Science Concepts and Global Systems</td>
</tr>
<tr>
<td>OR</td>
<td>(after 2012)</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=SC01&courseID=22690. CRICOS No.00213J
Bachelor of Applied Science (Chemistry)

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>speaking</th>
<th>writing</th>
<th>reading</th>
<th>listening</th>
<th>overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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 Insitute (RACI).

Domestic Course structure

Year 1

You will undertake introductory core studies in a range of scientific areas including life sciences, chemistry, physics, mathematics and environmental science to give you a solid foundation for your future studies. If you are taking the chemistry for industry second major you will be provided with opportunities to develop further laboratory skills. If you are taking chemistry with forensic science, you will also cover introductory life science topics that prepare you for important tasks like DNA profiling.

Year 2

You will begin more specialised study of the core chemistry sub-disciplines of analytical inorganic, organic and physical
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.

**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:

**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.

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=SC01&courseID=22590. CRICOS No.00213J
Bachelor of Applied Science (Ecology)

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 planet 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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB110</td>
<td>Science Concepts and Global Systems</td>
</tr>
<tr>
<td>OR (after 2012)</td>
<td></td>
</tr>
<tr>
<td>SC011</td>
<td>Selective*</td>
</tr>
<tr>
<td>[*See &quot;Science Selective Units&quot; options on e-Student or refer to list at the bottom of the page.]</td>
<td></td>
</tr>
<tr>
<td>SCB111</td>
<td>Chemistry 1</td>
</tr>
<tr>
<td>OR (after Semester 1 2013)</td>
<td></td>
</tr>
<tr>
<td>CVB101</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>[Please note CVB101 is only offered in semester 2.]</td>
<td></td>
</tr>
<tr>
<td>Cellular Basis of Life</td>
<td>OR (after 2012)</td>
</tr>
<tr>
<td>BVV101</td>
<td>Foundations of Biology</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>LQB182</td>
<td>Human Cell &amp; Molecular Biology</td>
</tr>
<tr>
<td>[BVV101 is highly recommended for Ecology major and Environmental Science major students. Please note: BVV101 is only offered in Semester 2.]</td>
<td></td>
</tr>
<tr>
<td>Plus ONE of:</td>
<td></td>
</tr>
<tr>
<td>MAB101</td>
<td>Statistical Data Analysis 1</td>
</tr>
<tr>
<td>MAB105</td>
<td>Preparatory Mathematics</td>
</tr>
<tr>
<td>MAB120</td>
<td>Foundations of Calculus and Algebra</td>
</tr>
<tr>
<td>MAB121</td>
<td>Single Variable Calculus and Differential Equations</td>
</tr>
<tr>
<td>1. Students with a Sound Achievement (4 semesters) in Maths A should enrol in MAB105.</td>
<td></td>
</tr>
<tr>
<td>2. Students with a Sound Achievement in Maths B and NOT wishing to major in Physics should enrol in MAB101.</td>
<td></td>
</tr>
<tr>
<td>3. Students with a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB121.</td>
<td></td>
</tr>
<tr>
<td>4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB120.</td>
<td></td>
</tr>
<tr>
<td>5. Students without a Sound Achievement in Maths B or Maths A should consult with the course coordinator.</td>
<td></td>
</tr>
<tr>
<td>Year 1, Semester 2 (Ecology and Environmental Science Pre-Major Strand)</td>
<td></td>
</tr>
</tbody>
</table>

---

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=SC01&courseID=22550. CRICOS No.00213J](http://www.student.qut.edu.au/studying/courses/course?courseCode=SC01&courseID=22550. CRICOS No.00213J)
**Bachelor of Applied Science (Environmental Science)**

### 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)).

#### English proficiency requirements.

**IELTS (International English Language Testing System)**

<table>
<thead>
<tr>
<th>Component</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>Writing</td>
<td>6.0</td>
</tr>
<tr>
<td>Reading</td>
<td>6.0</td>
</tr>
<tr>
<td>Listening</td>
<td>6.0</td>
</tr>
<tr>
<td>Overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

**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.

**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.

#### 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.

**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.

### Sample Structure

#### Semesters

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB110</td>
<td>Science Concepts and Global Systems</td>
</tr>
<tr>
<td>OR (after 2012)</td>
<td></td>
</tr>
<tr>
<td>SC01</td>
<td>Selective* [See &quot;Science Selective Units&quot; options on e-Student or refer to list at the bottom of the page.]</td>
</tr>
</tbody>
</table>

**Year 1, Semester 1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB111</td>
<td>Chemistry 1</td>
</tr>
<tr>
<td>OR (after Semester 1 2013)</td>
<td></td>
</tr>
<tr>
<td>CVB101</td>
<td>General Chemistry</td>
</tr>
</tbody>
</table>

**Recommended Second Majors:**
- *ELECTIVE UNIT FOR ALL MAJORS EXCEPT FORENSIC SCIENCE:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NQB403</td>
<td>Soils and the Environment</td>
</tr>
<tr>
<td>NQB421</td>
<td>Experimental Design</td>
</tr>
</tbody>
</table>

**Year 1, Semester 2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB123</td>
<td>Physical Science Applications</td>
</tr>
</tbody>
</table>

**Year 2, Semester 1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NQB501</td>
<td>Environmental Modelling</td>
</tr>
<tr>
<td>NQB502</td>
<td>Field Methods in Natural Resource Sciences</td>
</tr>
</tbody>
</table>

**Year 2, Semester 2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NQB601</td>
<td>Sustainable Environmental Management</td>
</tr>
</tbody>
</table>

**Year 3, Semester 1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB550</td>
<td>Industry Project</td>
</tr>
</tbody>
</table>

**Year 3, Semester 2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LQB182</td>
<td>Human Cell &amp; Molecular Biology</td>
</tr>
</tbody>
</table>

**Recommended Second Majors:**
- *ELECTIVE UNIT FOR ALL MAJORS EXCEPT FORENSIC SCIENCE:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB120</td>
<td>Plant and Animal Physiology</td>
</tr>
<tr>
<td>OR (after 2012)</td>
<td></td>
</tr>
<tr>
<td>NQB423</td>
<td>Vertebrate Biology</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>NQB323</td>
<td>Plant Biology</td>
</tr>
</tbody>
</table>

[Please note NQB323 is only offered in semester 1.]

**Plus ONE of:**
- BVB102 Evolution
- ERB102 Evolving Earth
- PVB101 Physics of the Very Large

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NQB501</td>
<td>Environmental Modelling</td>
</tr>
<tr>
<td>NQB502</td>
<td>Field Methods in Natural Resource Sciences</td>
</tr>
</tbody>
</table>

**Year 3, Semester 2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LQB182</td>
<td>Human Cell &amp; Molecular Biology</td>
</tr>
</tbody>
</table>

**Recommended Second Majors:**
- *ELECTIVE UNIT FOR ALL MAJORS EXCEPT FORENSIC SCIENCE:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB550</td>
<td>Industry Project</td>
</tr>
</tbody>
</table>

**Year 3, Semester 2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB110</td>
<td>Science Concepts and Global Systems</td>
</tr>
<tr>
<td>OR (after 2012)</td>
<td></td>
</tr>
<tr>
<td>SCB111</td>
<td>Chemistry 1</td>
</tr>
<tr>
<td>OR (after 2012)</td>
<td></td>
</tr>
<tr>
<td>CVB102</td>
<td>General Chemistry</td>
</tr>
</tbody>
</table>

**Recommended Second Majors:**
- *ELECTIVE UNIT FOR ALL MAJORS EXCEPT FORENSIC SCIENCE:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NQB403</td>
<td>Soils and the Environment</td>
</tr>
<tr>
<td>NQB421</td>
<td>Experimental Design</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NQB601</td>
<td>Sustainable Environmental Management</td>
</tr>
</tbody>
</table>

**Recommended Second Majors:**
- *ELECTIVE UNIT FOR ALL MAJORS EXCEPT FORENSIC SCIENCE:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB550</td>
<td>Industry Project</td>
</tr>
</tbody>
</table>

**Year 3, Semester 2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NQB501</td>
<td>Environmental Modelling</td>
</tr>
<tr>
<td>NQB502</td>
<td>Field Methods in Natural Resource Sciences</td>
</tr>
</tbody>
</table>

**Recommended Second Majors:**
- *ELECTIVE UNIT FOR ALL MAJORS EXCEPT FORENSIC SCIENCE:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB550</td>
<td>Industry Project</td>
</tr>
</tbody>
</table>

**Year 3, Semester 2**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>LQB182</td>
<td>Human Cell &amp; Molecular Biology</td>
</tr>
</tbody>
</table>

**Recommended Second Majors:**
- *ELECTIVE UNIT FOR ALL MAJORS EXCEPT FORENSIC SCIENCE:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NQB403</td>
<td>Soils and the Environment</td>
</tr>
<tr>
<td>NQB421</td>
<td>Experimental Design</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=SC01&courseID=22650. CRICOS No.00213J.
Bachelor of Applied Science (Forensic Science)

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

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 Science 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...
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**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB110</td>
<td>Science Concepts and Global Systems</td>
</tr>
<tr>
<td>OR (after 2012)</td>
<td></td>
</tr>
</tbody>
</table>
| SC01 Selective* | [
| ['See “Science Selective Units” options on e-Students 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                           |

<table>
<thead>
<tr>
<th>Year 2, Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>LQB383</td>
</tr>
<tr>
<td>SCB384</td>
</tr>
<tr>
<td>Plus TWO other units selected according to the second major requirements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2, Semester 2*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PQB580</td>
</tr>
<tr>
<td>(LQB680 changed to PQB580 in 2013.)</td>
</tr>
<tr>
<td>PQB312</td>
</tr>
<tr>
<td>Plus TWO other units selected according to the second major requirements</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3, Semester 1*</th>
</tr>
</thead>
<tbody>
<tr>
<td>PQB513</td>
</tr>
</tbody>
</table>

[Please note CVB101 is only offered in semester 2.]

For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=SC01&courseID=22630. CRICOS No.00213J
### 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)

<table>
<thead>
<tr>
<th>Test Type</th>
<th>Band Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

### 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

<table>
<thead>
<tr>
<th>Year 1, Semester 1</th>
<th>SCB110</th>
<th>Science Concepts and Global Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR (after 2012)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SC01 Selective*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(*See “Science Selective Units” options on e-Student or refer to list at the bottom of the page)

<table>
<thead>
<tr>
<th>Year 1, Semester 1</th>
<th>CVB101</th>
<th>General Chemistry</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR (after Semester 1 2013)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(please note CVB101 is only offered in semester 2.)

<table>
<thead>
<tr>
<th>Year 1, Semester 1</th>
<th>LOB182</th>
<th>Human Cell &amp; Molecular Biology</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2 (Geoscience Pre-Major Strand)</th>
<th>NQB201</th>
<th>Planet Earth</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR (after 2012)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
<th>ERB101</th>
<th>Earth Systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR (after 2012)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
<th>NQB202</th>
<th>History of Life on Earth</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR (after 2012)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
<th>ERB102</th>
<th>Evolving Earth</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR (after 2012)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
<th>SCB123</th>
<th>Physical Science Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR (after 2012)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
<th>PVB101</th>
<th>Physics of the Very Large</th>
</tr>
</thead>
<tbody>
<tr>
<td>OR (after 2012)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
<th>SC01 Selective*</th>
<th></th>
</tr>
</thead>
</table>

(*See “Science Selective Units” options on e-Student or refer to list at the bottom of the page)

<table>
<thead>
<tr>
<th>Year 2, Semester 1</th>
<th>NQB314</th>
<th>Sedimentary Geology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plus TWO other units selected according to the second major requirements</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2, Semester 2</th>
<th>NQB411</th>
<th>Petrology of Igneous and Metamorphic Rocks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plus TWO other units selected according to the second major requirements</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3, Semester 1</th>
<th>NQB502</th>
<th>Field Methods in Natural Resource Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plus THREE other units selected according to the second major requirements</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Recommended Second Majors:

- Environmental Science, Geosciences
- Geology
- Physics
- Applied Geology

* 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.
### Bachelor of Applied Science (Microbiology)

<table>
<thead>
<tr>
<th><strong>Year</strong></th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QUT code</strong></td>
<td>SC01</td>
</tr>
<tr>
<td><strong>CRICOS</strong></td>
<td>003502J</td>
</tr>
<tr>
<td><strong>Duration (full-time)</strong></td>
<td>3 years</td>
</tr>
<tr>
<td><strong>Duration (part-time domestic)</strong></td>
<td>6 years</td>
</tr>
<tr>
<td><strong>Rank</strong></td>
<td>72</td>
</tr>
<tr>
<td><strong>OP Guarantee</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Campus</strong></td>
<td>Gardens Point</td>
</tr>
<tr>
<td><strong>Domestic fee (indicative)</strong></td>
<td>2013: CSP $4200 per Semester (48 credit points)</td>
</tr>
<tr>
<td><strong>International fee (indicative)</strong></td>
<td>2013: $12,900 per Semester</td>
</tr>
<tr>
<td><strong>Total credit points</strong></td>
<td>288</td>
</tr>
<tr>
<td><strong>Credit points full-time sem.</strong></td>
<td>48</td>
</tr>
<tr>
<td><strong>Credit points part-time sem.</strong></td>
<td>24</td>
</tr>
</tbody>
</table>

| **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 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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

**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
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.

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 microorganisms 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 microorganisms using light microscopy and electron microscopy. You will also isolate 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 microorganisms using light microscopy and electron microscopy. You will also isolate and reproduce.

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.

Sample Structure

Semesters

- **Year 1, Semester 1**
- **Year 1, Semester 2 (Life Sciences Pre-Major Strand)**

**Year 2, Semester 1**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB110</td>
<td>Science Concepts and Global Systems</td>
</tr>
<tr>
<td>OR (after 2012)</td>
<td></td>
</tr>
<tr>
<td>SCO1 Selective*</td>
<td></td>
</tr>
<tr>
<td>[*See “Science Selective Units” options on e-Student or refer to list at the bottom of the page]</td>
<td></td>
</tr>
<tr>
<td>SCB111</td>
<td>Chemistry 1</td>
</tr>
<tr>
<td>OR (after Semester 1 2013)</td>
<td></td>
</tr>
<tr>
<td>CVB101</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>[Please note CVB101 is only offered in semester 2.]</td>
<td></td>
</tr>
<tr>
<td>Cellular Basis of Life</td>
<td></td>
</tr>
<tr>
<td>OR (after 2012)</td>
<td></td>
</tr>
<tr>
<td>LQB182</td>
<td>Human Cell &amp; Molecular Biology</td>
</tr>
<tr>
<td>Plus ONE of:</td>
<td></td>
</tr>
<tr>
<td>MAB101</td>
<td>Statistical Data Analysis 1</td>
</tr>
<tr>
<td>MAB105</td>
<td>Preparatory Mathematics</td>
</tr>
<tr>
<td>MAB120</td>
<td>Foundations of Calculus and Algebra</td>
</tr>
<tr>
<td>MAB121</td>
<td>Single Variable Calculus and Differential Equations</td>
</tr>
<tr>
<td>1. Students without a Sound Achievement (4 semesters) in Maths A should enrol in MAB105.</td>
<td></td>
</tr>
<tr>
<td>2. Students with a Sound Achievement in Maths B and NOT wishing to major in Physics should enrol in MAB101.</td>
<td></td>
</tr>
<tr>
<td>3. Students with a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB121.</td>
<td></td>
</tr>
<tr>
<td>4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB120.</td>
<td></td>
</tr>
<tr>
<td>5. Students without a Sound Achievement in Maths B or Maths A should consult with the course coordinator.</td>
<td></td>
</tr>
</tbody>
</table>

**Year 1, Semester 2 (Life Sciences Pre-Major Strand)**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB120</td>
<td>Plant and Animal Physiology</td>
</tr>
<tr>
<td>[Note: students taking forensic science or chemistry second majors should replace SCB120 Plant and Animal Physiology with SCB131 Experimental Chemistry].</td>
<td></td>
</tr>
<tr>
<td>OR (after 2012)</td>
<td></td>
</tr>
<tr>
<td>LSB258</td>
<td>Principles of Human Physiology</td>
</tr>
<tr>
<td>OR</td>
<td></td>
</tr>
<tr>
<td>LSB142</td>
<td>Human Anatomy and Physiology</td>
</tr>
<tr>
<td>[Please note LSB142 is only offered in semester 1.]</td>
<td></td>
</tr>
<tr>
<td>SCB121</td>
<td>Chemistry 2</td>
</tr>
<tr>
<td>OR (after Semester 1 2013)</td>
<td></td>
</tr>
<tr>
<td>CVB102</td>
<td>Chemical Structure and Reactivity</td>
</tr>
<tr>
<td>Cell and Molecular Biology</td>
<td></td>
</tr>
<tr>
<td>OR (after 2012)</td>
<td></td>
</tr>
<tr>
<td>LQB281</td>
<td>Human Health &amp; Disease Concepts</td>
</tr>
<tr>
<td>[Students who have already completed SCB112, must do LQB182 instead of LQB281.]</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Applied Science (Physics)

**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**

**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 second area of specialisation (second major) also begins. Second majors offered to physics students include astrophysics, mathematics, geoscience, games technology and music.

Year 3
You will proceed to further specialist areas including quantum physics, condensed matter physics, statistical mechanics and advanced electromagnetism. Your studies in experimental physics will help you develop data collection and data processing skills, and allow you to experience the methods used and to acquire the skills required to undertake research.
International Course structure

Year 1
You will be introduced to a broad range of physics topics including mechanics, electricity, optics, waves, electromagnetism and atomic physics. Mathematics units will provide you with the skills and background knowledge required to support more advanced study in second and third years. You may choose to undertake a foundation unit in one of the other scientific disciplines to broaden your knowledge. You also have the flexibility to select two elective units to add another dimension to your science knowledge.

Year 2
You will begin to study specialist areas of physics at advanced level. Topics include electronics, instrumentation, radiation physics, thermodynamics and solid-state physics. Study of a secondary area of specialisation (second major) also begins. Second majors offered to physics students include astrophysics, mathematics, geoscience, games technology and music.

Year 3
You will proceed to further specialist areas including quantum physics, condensed matter physics, statistical mechanics and advanced electromagnetism. Your studies in experimental physics will help you develop data collection and data processing skills, and allow you to experience the methods used and to acquire the skills required to undertake research.

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
--- | ---
SCB110 | Science Concepts and Global Systems
OR (after 2012) | SC01 Selective*
SCB111 | Chemistry 1

[OR (after Semester 1 2013)]

- **CVB101** General Chemistry

[Please note CVB101 is only offered in semester 2.]

- **Cellular Basis of Life**
- **LOB182** Human Cell & Molecular Biology
- **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
- **PVB101** Physics of the Very Large
- **PVB251** Waves and Optics
- **PVB102** Physics of the Very Small

Plus either:

- **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 other units 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 *

- **PQB650** Advanced Theoretical Physics
- **PQB651** Experimental Physics

Plus TWO other units selected according to the second major requirements

### Year 3, Semester 2 *

- **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.

---

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=SC01&courseID=22710. CRICOS No.00213J](http://www.student.qut.edu.au/studying/courses/course?courseCode=SC01&courseID=22710. CRICOS No.00213J)
Handbook

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

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.

**International Subject prerequisites**
- Physics
- Maths C
- Maths B
- English
- Chemistry

**Minimum english requirements**
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>6.0</th>
<th>6.0</th>
<th>6.0</th>
<th>6.0</th>
<th>6.5</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>writing</td>
<td>reading</td>
<td>listening</td>
<td>overall</td>
<td></td>
</tr>
</tbody>
</table>

**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, Microbiology, Physics.

**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

**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:

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

**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.

**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:


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.

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=SC01 + SC60&courseID=23071. CRICOS No.00213J
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
- 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
- Genetics and Genomics
- Forensic Science
- Applied Ecology
- Aviation
- Corporate IT
- Forensic Science
- Applied Ecology

Note: A second major comprises 96 credit points with at least 60 credit points at advanced level for the Science second majors and at least 48 credit points for the non-Science second majors. Major and second major studies may be taken in closely related discipline areas.

2. Optional (elective) units may be chosen from (a) ST01 majors/second majors other than those undertaken by a student, (b) other appropriate units offered by the Science and Engineering Faculty, and (c) units offered by other faculties.

3. Students are normally expected to complete the course in minimum time. A full-time student normally enrols in an average of 48 credit points per semester for six semesters and a part-time student normally enrols in 24 credit points per semester for 12 semesters. (A full-time student is one who is enrolled in an average of 48 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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 1</td>
<td></td>
</tr>
<tr>
<td>SEB101</td>
<td>Science in Context</td>
</tr>
<tr>
<td>SEB102</td>
<td>Understanding Science</td>
</tr>
<tr>
<td>SEB113</td>
<td>Quantitative Methods in Science</td>
</tr>
<tr>
<td>SEB114</td>
<td>Experimental Science</td>
</tr>
</tbody>
</table>

| 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 |

<p>| Year 2, Semester 1     |
| Major Unit              |
| Major Unit              |</p>
<table>
<thead>
<tr>
<th>Major Unit</th>
<th>Major Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd major or minor unit</td>
<td>2nd major or minor unit</td>
</tr>
</tbody>
</table>

Year 2, Semester 2

<table>
<thead>
<tr>
<th>Major Unit</th>
<th>Major Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>2nd major or minor unit</td>
<td>2nd major or minor unit</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=ST01&courseID=24615. CRICOS No.00213J.
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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking: 6.0</td>
</tr>
<tr>
<td>writing: 6.0</td>
</tr>
<tr>
<td>reading: 6.0</td>
</tr>
<tr>
<td>listening: 6.0</td>
</tr>
<tr>
<td>overall: 6.5</td>
</tr>
</tbody>
</table>

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.

Biology 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.
Bachelor of Science (Biological Sciences)

Domestic Course structure
Your degree course
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

<table>
<thead>
<tr>
<th>Year 1, Semester 1</th>
<th>Year 1, Semester 2</th>
<th>Year 2, Semester 1</th>
<th>Year 2, Semester 2</th>
<th>Year 3, Semester 1</th>
<th>Year 3, Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEB101 Science in Context</td>
<td>SEB102 Understanding Science</td>
<td>SEB113 Quantitative Methods in Science</td>
<td>SEB114 Experimental Science</td>
<td>BVB101 Foundations of Biology</td>
<td>BVB102 Evolution</td>
</tr>
<tr>
<td>Core Unit Option</td>
<td>Core Unit Option</td>
<td>Core Unit Option</td>
<td>Core Unit Option</td>
<td>Core Unit Option</td>
<td>Core Unit Option</td>
</tr>
<tr>
<td>Year 2, Semester 1</td>
<td>Year 2, Semester 2</td>
<td>Year 3, Semester 1</td>
<td>Year 3, Semester 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BVB201 Biological Processes</td>
<td>Plant Biology</td>
<td>Animal Biology</td>
<td>Advanced Studies in Biology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental Biology</td>
<td>Ecology</td>
<td>Applied Biology</td>
<td>Integrative Biology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd major or minor unit</td>
<td>2nd major or minor unit</td>
<td>2nd major or minor unit</td>
<td>2nd major or minor unit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 3, Semester 1</td>
<td>Year 3, Semester 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Animal Biology</td>
<td>Advanced Studies in Biology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Applied Biology</td>
<td>Integrative Biology</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2nd major or minor unit</td>
<td>2nd major or minor unit</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=ST01&courseID=24610. CRICOS No. 00213J.
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)

<table>
<thead>
<tr>
<th>Skill</th>
<th>Band</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>Writing</td>
<td>6.0</td>
</tr>
<tr>
<td>Reading</td>
<td>6.0</td>
</tr>
<tr>
<td>Listening</td>
<td>6.0</td>
</tr>
<tr>
<td>Overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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 another discipline, 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 forensic laboratories because of their extensive practical training using modern analytical instrumentation. With the addition of a postgraduate diploma in another discipline, you may wish to pursue opportunities in the teaching profession.

Professional recognition
Graduates completing the chemistry major with the chemistry minor for industry second major are eligible for membership of the Royal Australian Chemical Institute.
Bachelor of Science (Chemistry)

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); 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

<table>
<thead>
<tr>
<th>Semesters</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 1</td>
<td>SEB101</td>
<td>Science in Context</td>
</tr>
<tr>
<td>Year 1, Semester 1</td>
<td>SEB102</td>
<td>Understanding Science</td>
</tr>
<tr>
<td>Year 1, Semester 1</td>
<td>SEB113</td>
<td>Quantitative Methods in Science</td>
</tr>
<tr>
<td>Year 1, Semester 1</td>
<td>SEB114</td>
<td>Experimental Science</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Semesters</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2, Semester 1</td>
<td>CVB101</td>
<td>General Chemistry</td>
</tr>
<tr>
<td>Year 2, Semester 1</td>
<td>CVB102</td>
<td>Chemical Structure and Reactivity</td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
<td>Core Unit Option</td>
<td>Core Unit Option</td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
<td>Inorganic Chemistry</td>
<td></td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
<td>Analytical Chemistry</td>
<td></td>
</tr>
<tr>
<td>Year 3, Semester 1</td>
<td>Organic Chemistry: Strategies for Synthesis</td>
<td></td>
</tr>
<tr>
<td>Year 3, Semester 2</td>
<td>Applied Physical Chemistry</td>
<td></td>
</tr>
<tr>
<td>Year 3, Semester 2</td>
<td>Coordination Chemistry</td>
<td></td>
</tr>
<tr>
<td>Year 3, Semester 2</td>
<td>Chemical Research</td>
<td></td>
</tr>
</tbody>
</table>

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.

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=ST01&courseID=24611. CRICOS No.00213J
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)

<table>
<thead>
<tr>
<th>Component</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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
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); an Extension 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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Y1S1</td>
<td>Year 1, Semester 1</td>
</tr>
<tr>
<td>Y1S2</td>
<td>Year 1, Semester 2</td>
</tr>
<tr>
<td>Y2S1</td>
<td>Year 2, Semester 1</td>
</tr>
<tr>
<td>Y2S2</td>
<td>Year 2, Semester 2</td>
</tr>
<tr>
<td>Y3S1</td>
<td>Year 3, Semester 1</td>
</tr>
<tr>
<td>Y3S2</td>
<td>Year 3, Semester 2</td>
</tr>
</tbody>
</table>

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

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
Bachelor of Science (Environmental Science)

Overview
We rely on our natural environment to sustain our lives and our lifestyles. Do you want to help the earth’s natural environment to maintain its integrity while continuing our urban and rural development? Have you wanted to be part of the solution to our increasing environmental issues such as climate change, air, water and soil quality, soil erosion, dry land salinity or water resources? We continually need to improve our understanding and management of the natural environment to balance our development with wise management while minimising impacts and degradation.

An understanding of the mechanisms controlling environmental systems provides the skills required to undertake a great range of scientific environmental planning and management, and tackle problems such as local water quality and ecosystem impacts, soil erosion, catchment and groundwater use, or adaptation to global climate change.

Career outcomes
Environmental scientists are continually needed in a wide variety of planning, management, monitoring and research careers. These roles are usually found in government departments and agencies, local councils, consultancy, and industrial and mining companies. As an environmental science graduate, you could be working in urban, rural or remote settings depending on your interests.

Graduates are equipped to assess resources, implement environmental impact programs, analyse and interpret environmental data and formulate contingency plans in a wide variety of areas. These include strategic land use planning; waste disposal; pollution measurement and control; coastal protection; environmental impact of mining, tourism and urban development; rehabilitation and reforestation of degraded sites; ground water assessment and modelling; flood plain planning; erosion control; and marine science.

Professional recognition
Graduates are eligible for membership of the Environment Institute of Australia and New Zealand and a variety of other scientific societies, including the Soil Science Society of Australia and the Ecological Society of Australia.

Domestic 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)

<table>
<thead>
<tr>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
<th>Listening</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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.

Bachelor of Science (Environmental Science)

Handbook

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUT code</td>
<td>ST01</td>
</tr>
<tr>
<td>CRICOS</td>
<td>077696D</td>
</tr>
<tr>
<td>Duration (full-time)</td>
<td>3 years</td>
</tr>
<tr>
<td>Duration (part-time domestic)</td>
<td>6 years</td>
</tr>
<tr>
<td>OP</td>
<td>13</td>
</tr>
<tr>
<td>Rank</td>
<td>72</td>
</tr>
<tr>
<td>OP Guarantee</td>
<td>Yes</td>
</tr>
<tr>
<td>Campus</td>
<td>Gardens Point</td>
</tr>
<tr>
<td>Domestic fee (indicative)</td>
<td>2013: CSP $4,200 per Semester</td>
</tr>
<tr>
<td>International fee (indicative)</td>
<td>2013: $14,000 per Semester</td>
</tr>
<tr>
<td>Total credit points</td>
<td>288</td>
</tr>
<tr>
<td>Credit points full-time sem.</td>
<td>48</td>
</tr>
<tr>
<td>Credit points part-time sem.</td>
<td>24</td>
</tr>
<tr>
<td>Start months</td>
<td>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.</td>
</tr>
<tr>
<td>Int. Start Months</td>
<td>February, July Students with advanced standing may be offered a place in the SC01 Bachelor of Applied Science.</td>
</tr>
<tr>
<td>Deferment</td>
<td>You can defer your offer and postpone the start of your course for one year</td>
</tr>
<tr>
<td>Course Coordinator</td>
<td>Dr Ian Williamson</td>
</tr>
<tr>
<td>Discipline Coordinator</td>
<td>Dr Andrew Baker</td>
</tr>
</tbody>
</table>
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
  - SEB101 Science in Context
  - SEB113 Quantitative Methods in Science
  - SEB114 Experimental Science

- 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

Bachelor of Science (Physics)

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUT code</td>
<td>ST01</td>
</tr>
<tr>
<td>CRICOS</td>
<td>077696D</td>
</tr>
<tr>
<td>Duration (full-time)</td>
<td>3 years</td>
</tr>
<tr>
<td>Duration (part-time domestic)</td>
<td>6 years</td>
</tr>
<tr>
<td>OP</td>
<td>13</td>
</tr>
<tr>
<td>Rank</td>
<td>72</td>
</tr>
<tr>
<td>OP Guarantee</td>
<td>Yes</td>
</tr>
<tr>
<td>Campus</td>
<td>Gardens Point</td>
</tr>
<tr>
<td>Domestic fee (indicative)</td>
<td>2013: CSP $4,200 per Semester (48 credit points)</td>
</tr>
<tr>
<td>International fee (indicative)</td>
<td>2013: $14,000 per Semester</td>
</tr>
<tr>
<td>Total credit points</td>
<td>288</td>
</tr>
<tr>
<td>Credit points full-time sem.</td>
<td>48</td>
</tr>
<tr>
<td>Credit points part-time sem.</td>
<td>24</td>
</tr>
<tr>
<td>Start months</td>
<td>February, July</td>
</tr>
<tr>
<td>Int. Start Months</td>
<td>February, July</td>
</tr>
<tr>
<td>Deferment</td>
<td>You can defer your offer and postpone the start of your course for one year</td>
</tr>
<tr>
<td>Course Coordinator</td>
<td>Dr Ian Williamson</td>
</tr>
<tr>
<td>Discipline Coordinator</td>
<td>Dr Jamie Trapp</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 1</td>
<td></td>
</tr>
<tr>
<td>SEB101</td>
<td>Science in Context</td>
</tr>
<tr>
<td>SEB102</td>
<td>Understanding Science</td>
</tr>
<tr>
<td>SEB113</td>
<td>Quantitative Methods in Science</td>
</tr>
<tr>
<td>SEB114</td>
<td>Experimental Science</td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
<td></td>
</tr>
<tr>
<td>PVB101</td>
<td>Physics of the Very Large</td>
</tr>
<tr>
<td>PVB102</td>
<td>Physics of the Very Small</td>
</tr>
<tr>
<td>Core Unit Option</td>
<td></td>
</tr>
<tr>
<td>Core Unit Option</td>
<td></td>
</tr>
<tr>
<td>Year 3, Semester 1</td>
<td></td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
<td></td>
</tr>
<tr>
<td>Year 3, Semester 2</td>
<td></td>
</tr>
<tr>
<td>Core Unit Option</td>
<td></td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=ST01&courseID=24614. CRICOS No.00213J
Bachelor of Science - Dean's Scholars Program

Handbook

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUT code</td>
<td>ST01</td>
</tr>
<tr>
<td>Duration (full-time)</td>
<td>3 years</td>
</tr>
<tr>
<td>OP</td>
<td>1</td>
</tr>
<tr>
<td>Rank</td>
<td>99</td>
</tr>
<tr>
<td>Campus</td>
<td>Gardens Point</td>
</tr>
<tr>
<td>Domestic fee (indicative)</td>
<td>$4,200 per Semester</td>
</tr>
<tr>
<td>International fee (indicative)</td>
<td>$14,000 per Semester</td>
</tr>
<tr>
<td>Start months</td>
<td>February</td>
</tr>
<tr>
<td>Fixed closing date: The online questionnaire must be submitted by 16 November 2012.</td>
<td></td>
</tr>
</tbody>
</table>

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
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

<table>
<thead>
<tr>
<th>Semesters</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 1</td>
<td>SEB101</td>
<td>Science in Context</td>
</tr>
<tr>
<td></td>
<td>SEB102</td>
<td>Understanding Science</td>
</tr>
<tr>
<td></td>
<td>SEB113</td>
<td>Quantitative Methods in Science</td>
</tr>
<tr>
<td></td>
<td>SEB114</td>
<td>Experimental Science</td>
</tr>
<tr>
<td>Year 1, Semester 2</td>
<td>BVB101</td>
<td>Foundations of Biology</td>
</tr>
<tr>
<td></td>
<td>BVB102</td>
<td>Evolution</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Core Unit Option</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Core Unit Option</td>
</tr>
<tr>
<td>Year 2, Semester 1</td>
<td>BVB201</td>
<td>Biological Processes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Experimental Biology</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2nd major or minor unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2nd major or minor unit</td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Plant Biology</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Technology Innovation

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
<th>Listening</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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 extracurricular 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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=ST50&courseID=24337. CRICOS No.00213J
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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking: 6.0</td>
</tr>
<tr>
<td>writing: 6.0</td>
</tr>
<tr>
<td>reading: 6.0</td>
</tr>
<tr>
<td>listening: 6.0</td>
</tr>
<tr>
<td>overall: 6.5</td>
</tr>
</tbody>
</table>

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 extracurricular 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.

### Sample Structure

#### Semesters

- **Year 1, Semester 1**
  - SCB110: Science Concepts and Global Systems
  - SCB111: Chemistry 1
- **Year 1, Semester 2**
  - SCB112: Plant and Animal Physiology
  - MAB105: Preparatory Mathematics

### 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.
Bachelor of Technology Innovation (Biomedical Science)

**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
</tr>
<tr>
<td>writing</td>
</tr>
<tr>
<td>reading</td>
</tr>
<tr>
<td>listening</td>
</tr>
<tr>
<td>overall</td>
</tr>
</tbody>
</table>

**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.
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**
  - LQB255 Human Anatomy
  - PCB150 Biomedical Physics
  - SCB121 Chemistry 2
- **Year 1, Semester 2**
  - SCB110 Science Concepts and Global Systems
  - SCB111 Chemistry 1
  - Cellular Basis of Life
- **Year 2, Semester 1**
  - LSB255 Human Anatomy
  - PCB150 Biomedical Physics
  - SCB121 Chemistry 2
  - Cell and Molecular Biology
- **Year 2, Semester 2**
  - LQB383 Molecular and Cellular Regulation
  - LQB386 Microbial Structure and Function
  - LQB388 Medical Physiology 1
  - LSB325 Biochemistry
- **Year 3, Semester 1**
  - 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**
  - BSB115 Management
  - 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

---

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=ST50&courseID=24399. CRICOS No.00213](http://www.student.qut.edu.au/studying/courses/course?courseCode=ST50&courseID=24399. CRICOS No.00213)
Bachelor of Technology Innovation (Biotechnology)

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=ST50&courseID=24400. CRICOS No.00213J

Handbook

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUT code</td>
<td>ST50</td>
</tr>
<tr>
<td>CRICOS</td>
<td>070694G</td>
</tr>
<tr>
<td>Duration (full-time)</td>
<td>4 years</td>
</tr>
<tr>
<td>Duration (part-time domestic)</td>
<td>8 years</td>
</tr>
<tr>
<td>OP</td>
<td>12</td>
</tr>
<tr>
<td>Rank</td>
<td>76</td>
</tr>
<tr>
<td>OP Guarantee</td>
<td>Yes</td>
</tr>
<tr>
<td>Campus</td>
<td>Gardens Point</td>
</tr>
<tr>
<td>Domestic fee (indicative)</td>
<td>2013: CSP $4200 per Semester (48 credit points)</td>
</tr>
<tr>
<td>International fee (indicative)</td>
<td>2013: $12,900 per Semester</td>
</tr>
<tr>
<td>Total credit points</td>
<td>384</td>
</tr>
<tr>
<td>Credit points full-time sem.</td>
<td>48</td>
</tr>
<tr>
<td>Dom. Start Months</td>
<td>February</td>
</tr>
<tr>
<td>Deferral</td>
<td>You can defer your offer and postpone the start of your course for one year</td>
</tr>
<tr>
<td>Course Coordinator</td>
<td>Associate Professor Chris Collet</td>
</tr>
<tr>
<td>Discipline Coordinator</td>
<td></td>
</tr>
</tbody>
</table>

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.

Sample Structure

Seminars
- 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

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.

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.
Handbook

Bachelor of Technology Innovation (Chemistry)

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
Deferral 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 extracurricular 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.

Sample Structure

Seminars

Year 1 Semester 1
Science Concepts and Global Systems
Chemistry 1
Cellular Basis of Life
MAB101 Statistical Data Analysis 1
MAB105 Preparatory Mathematics
MAB120 Foundations of Calculus and Algebra
MAB121 Single Variable Calculus and Differential Equations

Year 1 Semester 2
SCB110 Science Concepts and Global Systems
SCB111 Chemistry 1
Cellular Basis of Life
MAB101 Statistical Data Analysis 1
MAB105 Preparatory Mathematics
MAB120 Foundations of Calculus and Algebra
MAB121 Single Variable Calculus and Differential Equations

Year 2 Semester 2
MAB120 Foundations of Calculus and Algebra

Year 3 Semester 1
STB123 Physical Science Applications
STB131 Experimental Chemistry
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

Year 4 Semester 1
PQB401 Reaction Kinetics, Thermodynamics and Mechanisms
PQB442 Chemical Spectroscopy

Year 3 Semester 2
STB709-1 Innovation and Commercialisation Project
STB709-2 Innovation and Commercialisation Project
STB709-3 Innovation and Commercialisation Project

Year 4 Semester 1
PQB502 Advanced Physical Chemistry
PQB531 Organic Mechanisms and Synthesis

Year 2 Semester 2
BSB115 Management
PQB404 Nanotechnology and Nanoscience

Year 3 Semester 1
BSB126 Marketing
MGB223 Entrepreneurship and Innovation
PQB6631 Advanced Inorganic Chemistry

Year 4 Semester 2
BSB126 Marketing
MGB223 Entrepreneurship and Innovation

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=ST50&courseId=24401. CRICOS No.00213J
### Bachelor of Technology Innovation (Digital Media)

#### Handbook

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUT code</td>
<td>ST50</td>
</tr>
<tr>
<td>CRICOS</td>
<td>070694G</td>
</tr>
<tr>
<td>Duration (full-time)</td>
<td>4 years</td>
</tr>
<tr>
<td>Duration (part-time domestic)</td>
<td>8 years</td>
</tr>
<tr>
<td>OP</td>
<td>12</td>
</tr>
<tr>
<td>Rank</td>
<td>76</td>
</tr>
<tr>
<td>OP Guarantee</td>
<td>Yes</td>
</tr>
<tr>
<td>Campus</td>
<td>Gardens Point</td>
</tr>
<tr>
<td>Domestic fee (indicative)</td>
<td>2013: CSP $4200 per Semester (48 credit points)</td>
</tr>
<tr>
<td>International fee (indicative)</td>
<td>2013: $12,900 per Semester</td>
</tr>
<tr>
<td>Total credit points</td>
<td>384</td>
</tr>
<tr>
<td>Credit points full-time sem.</td>
<td>48</td>
</tr>
<tr>
<td>Dom. Start Months</td>
<td>February</td>
</tr>
<tr>
<td>Deferment</td>
<td>You can defer your offer and postpone the start of your course for one year</td>
</tr>
<tr>
<td>Course Coordinator</td>
<td>Associate Professor Chris Collet</td>
</tr>
<tr>
<td>Discipline Coordinator</td>
<td></td>
</tr>
</tbody>
</table>

#### 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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking 6.0</td>
</tr>
<tr>
<td>writing 6.0</td>
</tr>
<tr>
<td>reading 6.0</td>
</tr>
<tr>
<td>listening 6.0</td>
</tr>
<tr>
<td>overall 6.5</td>
</tr>
</tbody>
</table>

#### 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.

Sample Structure

<table>
<thead>
<tr>
<th>Semesters</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 Semester 1</td>
<td>INB101</td>
<td>Impact of IT</td>
</tr>
<tr>
<td>Year 1 Semester 2</td>
<td>INB104</td>
<td>Building IT Systems</td>
</tr>
<tr>
<td>Year 2 Semester 1</td>
<td>INB180</td>
<td>Computer Games Studies</td>
</tr>
<tr>
<td>Year 2 Semester 2</td>
<td>INB182</td>
<td>Introducing Design</td>
</tr>
<tr>
<td>Year 3 Semester 1</td>
<td>INB103</td>
<td>Industry Insights</td>
</tr>
<tr>
<td>Year 3 Semester 1</td>
<td>INB181</td>
<td>Introduction to Games Production</td>
</tr>
<tr>
<td>Year 4 Semester 1</td>
<td>Block C or Block D Unit</td>
<td></td>
</tr>
<tr>
<td>Year 2 Semester 2</td>
<td>INB385</td>
<td>Multimedia Systems</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>KIB101</td>
<td>Visual Communication</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>KIB204</td>
<td>Web Interface Design</td>
</tr>
<tr>
<td>Year 3 Semester 1</td>
<td>BSB115</td>
<td>Management</td>
</tr>
<tr>
<td>Year 3 Semester 2</td>
<td>INB345</td>
<td>Mobile and Ubiquitous Computing</td>
</tr>
<tr>
<td>Year 3 Semester 2</td>
<td>KIB309</td>
<td>Embodied Interactions</td>
</tr>
<tr>
<td>Year 3 Semester 2</td>
<td>STB551</td>
<td>Engaging with the Innovation Industry</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>BSB126</td>
<td>Marketing</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>KIB314</td>
<td>Tangible Media</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>MGB223</td>
<td>Entrepreneurship and Innovation</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>STB709-1</td>
<td>Innovation and Commercialisation Project</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>AMB240</td>
<td>Marketing Planning and Management</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>LWS007</td>
<td>Introduction To Intellectual Property Law</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>MGB324</td>
<td>Managing Business Growth</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>STB709-2</td>
<td>Innovation and Commercialisation Project</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>STB709-3</td>
<td>Innovation and Commercialisation Project</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>KVB105</td>
<td>Drawing for Design</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>KVB106</td>
<td>Drawing for Animation</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>KIB201</td>
<td>Concept Development for Game Design and Interactive Media</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>KIB202</td>
<td>Enabling Immersion</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>INB280</td>
<td>Fundamentals of Game Design</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>INB281</td>
<td>Advanced Game Design</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>INB272</td>
<td>Interaction Design</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>MAB120</td>
<td>Foundations of Calculus and Algebra</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>MAB122</td>
<td>Linear Algebra and Multivariable Calculus</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>MAB121</td>
<td>Single Variable Calculus and Differential Equations</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>MAB312</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>MAB311</td>
<td>[Students who have completed Maths C can substitute MAB120 with one of the following units: MAB311, MAB481 or MAB422]</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>MAB481</td>
<td>MOBILE AND NETWORK TECHNOLOGIES:</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studyng/courses/course?courseCode=ST56&courseId=24402. CRICOS No. 00213}
### Bachelor of Technology Innovation (Digital Media)

<table>
<thead>
<tr>
<th>Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB102</td>
<td>Emerging Technology</td>
</tr>
<tr>
<td>INB251</td>
<td>Networks</td>
</tr>
<tr>
<td>INB350</td>
<td>Internet Protocols and Services</td>
</tr>
<tr>
<td>INB353</td>
<td>Wireless and Mobile Networks</td>
</tr>
</tbody>
</table>

**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
Bachelor of Technology Innovation (Ecology)

**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking: 6.0</td>
</tr>
<tr>
<td>writing: 6.0</td>
</tr>
<tr>
<td>reading: 6.0</td>
</tr>
<tr>
<td>listening: 6.0</td>
</tr>
<tr>
<td>overall: 6.5</td>
</tr>
</tbody>
</table>

**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.
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.

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

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

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.
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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>speaking</th>
<th>writing</th>
<th>reading</th>
<th>listening</th>
<th>overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>IELTS</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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.

Sample Structure
Semesters

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB110</td>
<td>Science Concepts and Global Systems</td>
</tr>
<tr>
<td>SCB111</td>
<td>Chemistry 1</td>
</tr>
<tr>
<td></td>
<td>Plus ONE of the following four units:</td>
</tr>
<tr>
<td>MAB101</td>
<td>Statistical Data Analysis 1</td>
</tr>
<tr>
<td>MAB105</td>
<td>Preparatory Mathematics</td>
</tr>
<tr>
<td>MAB120</td>
<td>Foundations of Calculus and Algebra</td>
</tr>
<tr>
<td>MAB121</td>
<td>Single Variable Calculus and Differential Equations</td>
</tr>
</tbody>
</table>

NOTE: Students with a Sound Achievement in Maths B and NOT wishing to major in MAB101 should enrol in MAB105

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

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB120</td>
<td>Plant and Animal Physiology</td>
</tr>
<tr>
<td>SCB123</td>
<td>Physical Science Applications</td>
</tr>
<tr>
<td>NQB201</td>
<td>Planet Earth</td>
</tr>
<tr>
<td>SCB121</td>
<td>Chemistry 2</td>
</tr>
<tr>
<td>NQB302</td>
<td>Earth Surface Systems</td>
</tr>
<tr>
<td>NQB321</td>
<td>Ecology</td>
</tr>
<tr>
<td>NQB322</td>
<td>Invertebrate Biology</td>
</tr>
<tr>
<td>NQB323</td>
<td>Plant Biology</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
</tr>
</tbody>
</table>

Year 2 Semester 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>NQB403</td>
<td>Soils and the Environment</td>
</tr>
<tr>
<td>NQB421</td>
<td>Experimental Design</td>
</tr>
<tr>
<td>NQB502</td>
<td>Field Methods in Natural Resource Sciences</td>
</tr>
<tr>
<td>NQB503</td>
<td>Spatial Analysis of Environmental Systems</td>
</tr>
<tr>
<td>BSB115</td>
<td>Management</td>
</tr>
</tbody>
</table>

Year 2 Semester 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGB223</td>
<td>Entrepreneurship and Innovation</td>
</tr>
<tr>
<td>NQB601</td>
<td>Sustainable Environmental Management</td>
</tr>
<tr>
<td>NQB602</td>
<td>Environmental Chemistry</td>
</tr>
<tr>
<td>NQB614</td>
<td>Groundwater Systems</td>
</tr>
<tr>
<td>NQB623</td>
<td>Ecological Systems</td>
</tr>
<tr>
<td>BSB126</td>
<td>Marketing</td>
</tr>
</tbody>
</table>

Year 3 Semester 1

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AMB240</td>
<td>Marketing Planning and Management</td>
</tr>
<tr>
<td>LWS007</td>
<td>Introduction To Intellectual Property Law</td>
</tr>
<tr>
<td>MGB324</td>
<td>Managing Business Growth</td>
</tr>
<tr>
<td>STB709-1</td>
<td>Innovation and Commercialisation Project</td>
</tr>
<tr>
<td>BSB311</td>
<td>Innovation Commercialisation Strategies</td>
</tr>
</tbody>
</table>

Year 3 Semester 2

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGB225</td>
<td>Intercultural Communication and Negotiation Skills</td>
</tr>
<tr>
<td>STB709-2</td>
<td>Innovation and Commercialisation Project</td>
</tr>
<tr>
<td>STB709-3</td>
<td>Innovation and Commercialisation Project</td>
</tr>
</tbody>
</table>
Bachelor of Technology Innovation (Forensic Science)

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUT code</td>
<td>ST50</td>
</tr>
<tr>
<td>CRICOS</td>
<td>070694G</td>
</tr>
<tr>
<td>Duration (full-time)</td>
<td>4 years</td>
</tr>
<tr>
<td>Duration (part-time domestic)</td>
<td>8 years</td>
</tr>
<tr>
<td>OP</td>
<td>12</td>
</tr>
<tr>
<td>Rank</td>
<td>76</td>
</tr>
<tr>
<td>OP Guarantee</td>
<td>Yes</td>
</tr>
<tr>
<td>Campus</td>
<td>Gardens Point</td>
</tr>
<tr>
<td>Domestic fee (indicative)</td>
<td>2013: CSP $4200 per Semester (48 credit points)</td>
</tr>
<tr>
<td>International fee (indicative)</td>
<td>2013: $12,900 per Semester</td>
</tr>
<tr>
<td>Total credit points</td>
<td>384</td>
</tr>
<tr>
<td>Credit points full-time sem.</td>
<td>48</td>
</tr>
<tr>
<td>Dom. Start Months</td>
<td>February</td>
</tr>
<tr>
<td>Deferment</td>
<td>You can defer your offer and postpone the start of your course for one year</td>
</tr>
<tr>
<td>Course Coordinator</td>
<td>Associate Professor Chris Collet</td>
</tr>
<tr>
<td>Discipline Coordinator</td>
<td></td>
</tr>
</tbody>
</table>

**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>writing</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>reading</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>listening</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>overall</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>6.0</td>
</tr>
<tr>
<td>6.0</td>
</tr>
<tr>
<td>6.0</td>
</tr>
<tr>
<td>6.0</td>
</tr>
<tr>
<td>6.5</td>
</tr>
</tbody>
</table>

**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.

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**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>STB709-1</td>
<td>Science Concepts and Global Systems</td>
</tr>
<tr>
<td>STB709-2</td>
<td>Chemistry 1</td>
</tr>
<tr>
<td>STB709-3</td>
<td>Cellular Basis of Life</td>
</tr>
<tr>
<td>LWS007</td>
<td>Plus ONE from the following four units:</td>
</tr>
<tr>
<td></td>
<td>MAB101 Statistical Data Analysis 1</td>
</tr>
<tr>
<td></td>
<td>MAB105 Preparatory Mathematics</td>
</tr>
<tr>
<td></td>
<td>MAB120 Foundations of Calculus and Algebra</td>
</tr>
<tr>
<td></td>
<td>MAB121 Single Variable Calculus and</td>
</tr>
<tr>
<td></td>
<td>Differential Equations</td>
</tr>
</tbody>
</table>

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

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.
### 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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking 6.0</td>
</tr>
<tr>
<td>writing 6.0</td>
</tr>
<tr>
<td>reading 6.0</td>
</tr>
<tr>
<td>listening 6.0</td>
</tr>
<tr>
<td>overall 6.5</td>
</tr>
</tbody>
</table>

### 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 extracurricular 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 extracurricular 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 extracurricular networking events and an industry career.

Sample Structure

<table>
<thead>
<tr>
<th>Semester</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 Semester 1</td>
<td>INB101</td>
<td>Impact of IT</td>
</tr>
<tr>
<td>Year 1 Semester 2</td>
<td>INB102</td>
<td>Building IT Systems</td>
</tr>
<tr>
<td>Year 2 Semester 1</td>
<td>INB180</td>
<td>Computer Games Studies</td>
</tr>
<tr>
<td>Year 2 Semester 2</td>
<td>INB182</td>
<td>Introducing Design</td>
</tr>
<tr>
<td>Year 3 Semester 1</td>
<td>INB370</td>
<td>Software Development</td>
</tr>
<tr>
<td>Year 3 Semester 2</td>
<td>INB371</td>
<td>Data Structures and Algorithms</td>
</tr>
<tr>
<td>Year 2 Semester 2</td>
<td>INB210</td>
<td>Databases</td>
</tr>
<tr>
<td>Year 3 Semester 1</td>
<td>INB250</td>
<td>Foundations of Computer Science</td>
</tr>
<tr>
<td>Year 4 Semester 1</td>
<td>INB381</td>
<td>Modelling and Animation Techniques</td>
</tr>
<tr>
<td>Year 3 Semester 2</td>
<td>INB383</td>
<td>AI for Games</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>KIB105</td>
<td>Animation and Motion Graphics</td>
</tr>
<tr>
<td>Year 3 Semester 2</td>
<td>STB709-1</td>
<td>Innovation and Commercialisation Project</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>STB709-3</td>
<td>Innovation and Commercialisation Project</td>
</tr>
<tr>
<td>Year 4 Semester 1</td>
<td>AMB240</td>
<td>Marketing Planning and Management</td>
</tr>
<tr>
<td>Year 3 Semester 2</td>
<td>MGB225</td>
<td>Intercultural Communication and Negotiation Skills</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>MGB324</td>
<td>Managing Business Growth</td>
</tr>
<tr>
<td>Year 3 Semester 2</td>
<td>STB709-2</td>
<td>Innovation and Commercialisation Project</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>STB709-3</td>
<td>Innovation and Commercialisation Project</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>KIB105</td>
<td>Animation and Motion Graphics</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>KIB106</td>
<td>Drawing for Animation</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>INB365</td>
<td>Systems Programming</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>INB372</td>
<td>Agile Software Development</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>INB374</td>
<td>Enterprise Software Architecture</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>INB382</td>
<td>Real Time Rendering Techniques</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>INB383</td>
<td>AI for Games</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>KIB101</td>
<td>Visual Communication</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>KIB102</td>
<td>Visual Interactions</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>INB385</td>
<td>Multimedia Systems</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>INB386</td>
<td>Advanced Multimedia Systems</td>
</tr>
<tr>
<td>Year 4 Semester 2</td>
<td>KIB105</td>
<td>Animation and Motion Graphics</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studyng/courses/course?courseCode=ST506&courseID=24272. CRICOS No. 00213.
# Bachelor of Technology Innovation (Games Technology)

<table>
<thead>
<tr>
<th>Unit Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>KIB201</td>
<td>Concept Development for Game Design and Interactive Media</td>
</tr>
<tr>
<td>KIB202</td>
<td>Enabling Immersion</td>
</tr>
<tr>
<td>INB280</td>
<td>Fundamentals of Game Design</td>
</tr>
<tr>
<td></td>
<td>Plus ONE from the following two units:</td>
</tr>
<tr>
<td>INB272</td>
<td>Interaction Design</td>
</tr>
<tr>
<td>INB281</td>
<td>Advanced Game Design</td>
</tr>
</tbody>
</table>

## 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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=ST50&courseID=24272. CRICOS No.00213J](http://www.student.qut.edu.au/studying/courses/course?courseCode=ST50&courseID=24272. CRICOS No.00213J)
Bachelor of Technology Innovation (Geoscience)

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.

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 extracurricular 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.

This information is correct as at 19/12/2013. For the most up-to-date course information, visit
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.

Sample Structure

Semesters

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

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

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

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

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.
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 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 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 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.
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**
  - INB101 Impact of IT
  - INB102 Emerging Technology
  - INB103 Industry Insights
  - INB104 Building IT Systems

- **Year 2 Semester 1**
  - 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 2**
  - 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 3 Semester 1**
  - BSB115 Management
  - STB551 Engaging with the Innovation Industry

- **Year 3 Semester 2**
  - 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
  - MGB225 Intercultural Communication and Negotiation Skills
  - STB709-2 Innovation and Commercialisation Project

- **Year 4 Semester 2**
  - BSB311 Innovation Commercialisation Strategies
  - MGB225 Intercultural Communication and Negotiation Skills
  - 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
<table>
<thead>
<tr>
<th>Code</th>
<th>Course Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB340</td>
<td>Database Design</td>
</tr>
<tr>
<td>INB341</td>
<td>Software Development With Oracle</td>
</tr>
<tr>
<td>INB342</td>
<td>Enterprise Data Mining and Data Analysis</td>
</tr>
<tr>
<td>INB343</td>
<td>Data Warehousing and Mining</td>
</tr>
</tbody>
</table>

**DATA WAREHOUSING:**

**NETWORK SYSTEMS:**

**SOFTWARE ENGINEERING:**

**DIGITAL ENVIRONMENTS**

**UNGROUPED UNITS:**

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=ST50&courseID=24348. CRICOS No.00213J](http://www.student.qut.edu.au/studying/courses/course?courseCode=ST50&courseID=24348. CRICOS No.00213J)
Bachelor of Technology Innovation (Microbiology)

**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking 6.0</td>
</tr>
<tr>
<td>writing 6.0</td>
</tr>
<tr>
<td>reading 6.0</td>
</tr>
<tr>
<td>listening 6.0</td>
</tr>
<tr>
<td>overall 6.5</td>
</tr>
</tbody>
</table>

**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
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
--- | ---
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  
| STB708-1 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 |

---

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=ST50&courseID=24391. CRICOS No.00213](http://www.student.qut.edu.au/studying/courses/course?courseCode=ST50&courseID=24391. CRICOS No.00213)
Bachelor of Technology Innovation (Physics)

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=ST50&courseID=24395. CRICOS No.00213J

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)

<table>
<thead>
<tr>
<th>Skill</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>Writing</td>
<td>6.0</td>
</tr>
<tr>
<td>Reading</td>
<td>6.0</td>
</tr>
<tr>
<td>Listening</td>
<td>6.0</td>
</tr>
<tr>
<td>Overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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

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
throughout 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

<table>
<thead>
<tr>
<th>Year 1 Semester 1</th>
<th>Year 1 Semester 2</th>
<th>Year 2 Semester 1</th>
<th>Year 2 Semester 2</th>
<th>Year 3 Semester 1</th>
<th>Year 3 Semester 2</th>
<th>Year 4 Semester 1</th>
<th>Year 4 Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB110 Science Concepts and Global Systems</td>
<td>SCB111 Chemistry 1</td>
<td>SCB112 Cellular Basis of Life</td>
<td>SCB113</td>
<td>SCB114</td>
<td>SCB115</td>
<td>SCB116</td>
<td></td>
</tr>
<tr>
<td>Plus ONE from the following four units:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAB101 Statistical Data Analysis 1</td>
<td>MAB102 Preparatory Mathematics</td>
<td>MAB103</td>
<td>MAB104</td>
<td>MAB105</td>
<td>MAB106</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAB120 Foundations of Calculus and Algebra</td>
<td>MAB121 Single Variable Calculus and Differential Equations</td>
<td>MAB122 Linear Algebra and Multivariable Calculus</td>
<td>MAB123</td>
<td>MAB124</td>
<td>MAB125</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NOTE: Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101</td>
<td>Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105</td>
<td>Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB121</td>
<td>Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB120</td>
<td>Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB120</td>
<td>Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB120</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.
### Bachelor of Urban Development

#### 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

<table>
<thead>
<tr>
<th><strong>Year</strong></th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>QUT code</strong></td>
<td>UD40</td>
</tr>
<tr>
<td><strong>CRICOS</strong></td>
<td>056387B</td>
</tr>
<tr>
<td><strong>Duration (full-time)</strong></td>
<td>4 years</td>
</tr>
<tr>
<td><strong>OP Guarantee</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Campus</strong></td>
<td>Gardens Point</td>
</tr>
<tr>
<td><strong>Domestic fee (indicative)</strong></td>
<td>2013: CSP $4,400 per Semester (48 credit points)</td>
</tr>
<tr>
<td><strong>International fee (indicative)</strong></td>
<td>2013: $12,700 per Semester</td>
</tr>
<tr>
<td><strong>Total credit points</strong></td>
<td>384</td>
</tr>
<tr>
<td><strong>Credit points full-time sem.</strong></td>
<td>48</td>
</tr>
<tr>
<td><strong>Dom. Start Months</strong></td>
<td>February</td>
</tr>
<tr>
<td><strong>Deferment</strong></td>
<td>You can defer your offer and postpone the start of your course for one year</td>
</tr>
<tr>
<td><strong>Course Coordinator</strong></td>
<td>Chris Eves</td>
</tr>
</tbody>
</table>
Bachelor of Urban Development (Construction Management)

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUT code</td>
<td>UD40</td>
</tr>
<tr>
<td>CRICOS</td>
<td>056387B</td>
</tr>
<tr>
<td>Duration (full-time)</td>
<td>4 years</td>
</tr>
<tr>
<td>OP</td>
<td>8</td>
</tr>
<tr>
<td>Rank</td>
<td>85</td>
</tr>
<tr>
<td>OP Guarantee</td>
<td>Yes</td>
</tr>
<tr>
<td>Campus</td>
<td>Gardens Point</td>
</tr>
<tr>
<td>Domestic fee (indicative)</td>
<td>2013: CSP $4,400 per Semester (48 credit points)</td>
</tr>
<tr>
<td>International fee (indicative)</td>
<td>2013: $12,700 per Semester</td>
</tr>
<tr>
<td>Total credit points</td>
<td>384</td>
</tr>
<tr>
<td>Credit points</td>
<td>48</td>
</tr>
<tr>
<td>Start months</td>
<td>February, July</td>
</tr>
<tr>
<td>Int. Start Months</td>
<td>February, July</td>
</tr>
<tr>
<td>Deferment</td>
<td>You can defer your offer and postpone the start of your course for one year</td>
</tr>
<tr>
<td>Course Coordinator</td>
<td>Chris Eves</td>
</tr>
<tr>
<td>Discipline Coordinator</td>
<td>Dr Matthew Gray</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking 6.0</td>
</tr>
<tr>
<td>writing 6.0</td>
</tr>
<tr>
<td>reading 6.0</td>
</tr>
<tr>
<td>listening 6.0</td>
</tr>
<tr>
<td>overall 6.0</td>
</tr>
</tbody>
</table>

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
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 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 UD40. The Project Collaboration Minor is highly recommended for students in Construction Management.

**Sample Structure**

**Seminesters**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB100</td>
<td>Urban Development and Sustainability</td>
</tr>
<tr>
<td>UDB101</td>
<td>Stewardship of Land</td>
</tr>
<tr>
<td>UDB110</td>
<td>Residential Construction and Engineering</td>
</tr>
<tr>
<td>UDB111</td>
<td>Engineering Construction Materials</td>
</tr>
<tr>
<td>UDB200</td>
<td>Project Planning in Urban Development</td>
</tr>
<tr>
<td>UDB104</td>
<td>Urban Development Economics</td>
</tr>
<tr>
<td>UDB112</td>
<td>Professional Studies 1</td>
</tr>
<tr>
<td>UDB113</td>
<td>Measurement 1</td>
</tr>
<tr>
<td>UDB210</td>
<td>Commercial Construction and Engineering</td>
</tr>
<tr>
<td>UDB211</td>
<td>Introductory Structural Engineering</td>
</tr>
<tr>
<td>UDB212</td>
<td>Measurement 2</td>
</tr>
<tr>
<td>UDB213</td>
<td>Construction Estimating</td>
</tr>
<tr>
<td>UDB102</td>
<td>Applied Law</td>
</tr>
<tr>
<td>UDB214</td>
<td>Professional Studies 2</td>
</tr>
<tr>
<td>UDB215</td>
<td>Building Services Engineering</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=UD40&courseID=24452. CRICOS No.00213J
Bachelor of Urban Development (Property Economics)

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.0</td>
</tr>
</tbody>
</table>

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.
Bachelor of Urban Development (Property Economics)

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

<table>
<thead>
<tr>
<th>Year 1 - Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB100 Urban Development and Sustainability</td>
</tr>
<tr>
<td>UDB101 Stewardship of Land</td>
</tr>
<tr>
<td>UDB110 Residential Construction and Engineering</td>
</tr>
<tr>
<td>UDB140 Property Valuation 1</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1 - Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB200 Project Planning in Urban Development</td>
</tr>
<tr>
<td>UDB102 Applied Law</td>
</tr>
<tr>
<td>UDB104 Urban Development Economics</td>
</tr>
<tr>
<td>UDB141 Building Studies</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2 - Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB240 Planning Theory and Processes</td>
</tr>
<tr>
<td>UDB241 Property Law 1</td>
</tr>
<tr>
<td>UDB242 Property Valuation 2</td>
</tr>
<tr>
<td>UDB243 Property Economics</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2 - Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB244 Property Law 2</td>
</tr>
<tr>
<td>UDB245 Urban Land Studies</td>
</tr>
<tr>
<td>UDB246 Property Feasibility Studies</td>
</tr>
<tr>
<td>UDB247 Property Valuation 3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3 - Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB301 Research Methods</td>
</tr>
<tr>
<td>UDB341 Property Finance</td>
</tr>
<tr>
<td>Second Major/Minor unit</td>
</tr>
<tr>
<td>Second Major/Minor unit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 3 - Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB302 Development Process</td>
</tr>
<tr>
<td>UDB344 Property and Asset Management</td>
</tr>
<tr>
<td>Second Major/Minor unit</td>
</tr>
<tr>
<td>Second Major/Minor unit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4 - Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB340 Agency Practice and Marketing</td>
</tr>
<tr>
<td>UDB342 Real Estate Accounting and Taxation</td>
</tr>
<tr>
<td>Second Major/Minor unit</td>
</tr>
<tr>
<td>Second Major/Minor unit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4 - Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB701 Work Integrated Learning 1</td>
</tr>
<tr>
<td>UDB202 Business Skills</td>
</tr>
<tr>
<td>Second Major/Minor unit</td>
</tr>
<tr>
<td>Second Major/Minor unit</td>
</tr>
</tbody>
</table>
Bachelor of Urban Development (Quantity Surveying)

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)

<table>
<thead>
<tr>
<th>Skill</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.0</td>
</tr>
</tbody>
</table>

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: sef.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.
Bachelor of Urban Development (Quantity Surveying)

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.

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.

Minors:

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

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

Seminesters

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB100</td>
<td>Urban Development and Sustainability</td>
</tr>
<tr>
<td>UDB101</td>
<td>Stewardship of Land</td>
</tr>
<tr>
<td>UDB110</td>
<td>Residential Construction and Engineering</td>
</tr>
<tr>
<td>UDB111</td>
<td>Engineering Construction Materials</td>
</tr>
<tr>
<td>Year 1 - Semester 1</td>
<td>Year 1 - Semester 2</td>
</tr>
<tr>
<td>Year 2 - Semester 1</td>
<td>Year 3 - Semester 1</td>
</tr>
<tr>
<td>Year 4 - Semester 1</td>
<td>Year 4 - Semester 2</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/study/courses/course?courseCode=UDB401&courseID=24450. CRICOS No.00213J
# Bachelor of Urban Development (Quantity Surveying)

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB104</td>
<td>Urban Development Economics</td>
</tr>
<tr>
<td>UDB112</td>
<td>Professional Studies 1</td>
</tr>
<tr>
<td>UDB113</td>
<td>Measurement 1</td>
</tr>
</tbody>
</table>

**Year 2 - Semester 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB210</td>
<td>Commercial Construction and Engineering</td>
</tr>
<tr>
<td>UDB212</td>
<td>Measurement 2</td>
</tr>
<tr>
<td>UDB213</td>
<td>Construction Estimating</td>
</tr>
<tr>
<td>UDB216</td>
<td>The Environment and the Quantity Surveyor</td>
</tr>
</tbody>
</table>

**Year 2 - Semester 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB102</td>
<td>Applied Law</td>
</tr>
<tr>
<td>UDB202</td>
<td>Business Skills</td>
</tr>
<tr>
<td>UDB215</td>
<td>Building Services Engineering</td>
</tr>
</tbody>
</table>

**Year 3 - Semester 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB310</td>
<td>Highrise Construction and Engineering</td>
</tr>
<tr>
<td>UDB312</td>
<td>Contract Administration</td>
</tr>
<tr>
<td>UDB315</td>
<td>Measurement 3</td>
</tr>
</tbody>
</table>

**Year 3 - Semester 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB314</td>
<td>Statutory Construction Law</td>
</tr>
<tr>
<td>UDB316</td>
<td>Cost Planning and Control</td>
</tr>
</tbody>
</table>

**Year 4 - Semester 1**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB701</td>
<td>Work Integrated Learning 1</td>
</tr>
<tr>
<td>UDB301</td>
<td>Research Methods</td>
</tr>
</tbody>
</table>

**Year 4 - Semester 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB801</td>
<td>Project 1</td>
</tr>
<tr>
<td>UDB302</td>
<td>Development Process</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit
Bachelor of Urban Development (Spatial Science)

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=UD40&courseID=24453. CRICOS No.00213J

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
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 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

Seminars

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year 1 - Semester 1</th>
<th>Year 1 - Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB100</td>
<td>Urban Development and Sustainability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAB120</td>
<td>Foundations of Calculus and Algebra</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB101</td>
<td>Stewardship of Land</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB161</td>
<td>Geospatial Positioning and GPS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year 1 - Semester 2</th>
<th>Year 2 - Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB200</td>
<td>Project Planning in Urban Development</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MAB101</td>
<td>Statistical Data Analysis 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB104</td>
<td>Urban Development Economics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB182</td>
<td>Surveying</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year 2 - Semester 1</th>
<th>Year 2 - Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCB172</td>
<td>Physics for Surveyors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB281</td>
<td>Geographic Information Systems</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB283</td>
<td>Surveying Computations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB285</td>
<td>Cadastral Surveying</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year 3 - Semester 1</th>
<th>Year 3 - Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAB730</td>
<td>Surveying Mathematics 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB102</td>
<td>Applied Law</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB282</td>
<td>Remote Sensing</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB284</td>
<td>Engineering Surveying</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year 3 - Semester 1</th>
<th>Year 3 - Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB381</td>
<td>Geospatial Mapping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB383</td>
<td>Control Surveying and Analysis</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB385</td>
<td>Cadastral and Land Management</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB387</td>
<td>Spatial and Land Information Management</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year 4 - Semester 1</th>
<th>Year 4 - Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB701</td>
<td>Work Integrated Learning 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB301</td>
<td>Research Methods</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB483</td>
<td>Global Positioning Principles and Practice</td>
<td></td>
<td></td>
</tr>
<tr>
<td>UDB485</td>
<td>Property Development Practice</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Year 4 - Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>BEB801</td>
<td>Project 1</td>
<td></td>
</tr>
<tr>
<td>UDB388</td>
<td>Spatial Analysis Practice</td>
<td></td>
</tr>
<tr>
<td>UDB484</td>
<td>Topographic, Hydrographic and Mining Surveying</td>
<td></td>
</tr>
<tr>
<td>UDB486</td>
<td>Cadastral Practice</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Urban Development (Urban and Regional Planning)

**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
<th>Listening</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students must meet the English proficiency requirements.</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
</tr>
</tbody>
</table>

**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 fulfills 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 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,
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
- Construction Management
- Construction Management
- Residential Construction

A minor from anywhere in QUT.

**Sample Structure**

**Semesters**

**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

**Year 2 - Semester 2**
- UDB102 Applied Law
- UDB202 Business Skills
- UDB267 Development Assessment and Infrastructure

**Year 3 - Semester 1**
- UDB368 Urban Design
- UDB369 Negotiation and Conflict Resolution
- UDB381 Geospatial Mapping

**Year 3 - Semester 2**
- BEB801 Project 1
- UDB302 Development Process
- UDB370 Environmental Planning and Management

**Year 4 - Semester 1**
- BEB701 Work Integrated Learning 1
- UDB301 Research Methods

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=UD40&courseID=24451. CRICOS No.00213J.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>UDB471</td>
<td>Urban Planning Practice</td>
</tr>
<tr>
<td>UDB473</td>
<td>Planning Theory and Ethics</td>
</tr>
<tr>
<td>BEB802</td>
<td>Project 2</td>
</tr>
<tr>
<td>UDB472</td>
<td>Community Planning</td>
</tr>
<tr>
<td>UDB474</td>
<td>Regional Planning Practice</td>
</tr>
<tr>
<td>UDB475</td>
<td>Regional and Metropolitan Policy</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=UD40&courseID=24451. CRICOS No.00213J
Bachelor of Urban Development - Dean's Scholars Program

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.

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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=UD40&courseID=24750. CRICOS No.00213J
Bachelor of Urban Development - Dean's Scholars Program

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 |
| UDB100 | Urban Development and Sustainability |
| UDB101 | Stewardship of Land |
| UDB110 | Residential Construction and Engineering |
| UDB111 | Engineering Construction Materials |

| Year 2 - Semester 1 |
| UDB200 | Project Planning in Urban Development |
| UDB104 | Urban Development Economics |
| UDB112 | Professional Studies 1 |
| UDB113 | Measurement 1 |

| Year 2 - Semester 2 |
| UDB210 | Commercial Construction and Engineering |
| UDB211 | Introductory Structural Engineering |
| UDB212 | Measurement 2 |
| UDB213 | Construction Estimating |

| 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 |

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=UD40&courseID=24750. CRICOS No.00213J
**Bachelor of Engineering (Electrical)/ Bachelor of 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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

**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

Seminesters

Year 1, Semester 1
Year 2, Semester 1
Year 3, Semester 1
Year 4, Semester 1
Year 5, Semester 1
Year 1, Semester 2
Year 2, Semester 2
Year 3, Semester 2
Year 4, Semester 2
Year 5, Semester 2
Electrical Engineering Selectives

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB100</td>
<td>Engineering and Sustainability</td>
</tr>
<tr>
<td>ENB130</td>
<td>Mechanical and Thermal Energy</td>
</tr>
<tr>
<td>MAB120</td>
<td>Foundations of Calculus and Algebra</td>
</tr>
<tr>
<td>MAB220</td>
<td>Computational Mathematics 1</td>
</tr>
<tr>
<td>ENB200</td>
<td>Introducing Engineering Systems</td>
</tr>
<tr>
<td>ENB120</td>
<td>Electrical Energy and Measurements</td>
</tr>
<tr>
<td>MAB121</td>
<td>Single Variable Calculus and Differential Equations</td>
</tr>
<tr>
<td>MAB122</td>
<td>Linear Algebra and Multivariable Calculus</td>
</tr>
<tr>
<td>ENB110</td>
<td>Engineering Statics and Materials</td>
</tr>
<tr>
<td>ENB250</td>
<td>Electrical Circuits</td>
</tr>
<tr>
<td>MAB233</td>
<td>Engineering Mathematics 3</td>
</tr>
<tr>
<td>MAB311</td>
<td>Advanced Calculus</td>
</tr>
<tr>
<td>ENB150</td>
<td>Introducing Engineering Design</td>
</tr>
<tr>
<td>MAB210</td>
<td>Probability and Stochastic Modelling 1</td>
</tr>
<tr>
<td>MAB413</td>
<td>Differential Equations</td>
</tr>
<tr>
<td></td>
<td>Mathematics Elective (Level 2)</td>
</tr>
<tr>
<td>ENB240</td>
<td>Introduction To Electronics</td>
</tr>
<tr>
<td>ENB246</td>
<td>Engineering Problem Solving</td>
</tr>
<tr>
<td>MAB312</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>MAB314</td>
<td>Probability and Stochastic Modelling 2</td>
</tr>
<tr>
<td>ENB242</td>
<td>Introduction To Telecommunications</td>
</tr>
<tr>
<td>ENB243</td>
<td>Linear Circuits and Systems</td>
</tr>
<tr>
<td>ENB244</td>
<td>Microprocessors and Digital Systems</td>
</tr>
<tr>
<td>ENB245</td>
<td>Introduction To Design and Professional Practice</td>
</tr>
<tr>
<td>ENB301</td>
<td>Instrumentation and Control</td>
</tr>
<tr>
<td>ENB340</td>
<td>Power Systems and Machines</td>
</tr>
<tr>
<td>ENB342</td>
<td>Signals, Systems and Transforms</td>
</tr>
<tr>
<td></td>
<td>Mathematics Elective (Level 3)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENB339</td>
<td>Introduction to Robotics</td>
</tr>
<tr>
<td>ENB441</td>
<td>Applied Image Processing</td>
</tr>
<tr>
<td>ENB448</td>
<td>Signal Processing and Filtering</td>
</tr>
<tr>
<td>ENB452</td>
<td>Advanced Power Systems Analysis</td>
</tr>
<tr>
<td>ENB453</td>
<td>Power Equipment and Utilisation</td>
</tr>
<tr>
<td>ENB456</td>
<td>Energy</td>
</tr>
<tr>
<td>ENB457</td>
<td>Controls, Systems and Applications</td>
</tr>
<tr>
<td>ENB458</td>
<td>Modern Control Systems</td>
</tr>
<tr>
<td>ENB345</td>
<td>Advanced Design and Professional Practice</td>
</tr>
<tr>
<td>MAB414</td>
<td>Applied Statistics 1</td>
</tr>
<tr>
<td></td>
<td>Mathematics Elective (Level 3)</td>
</tr>
<tr>
<td></td>
<td>Mathematics Elective (Level 3)</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IF21&courseID=22854. CRICOS No.00213j
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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>speaking</th>
<th>writing</th>
<th>reading</th>
<th>listening</th>
<th>overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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.
### Bachelor of Business/Bachelor of Information Technology

| **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) |

#### Minimum english requirements
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

#### 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.

---

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IF48&courseID=24111. CRICOS No.00213J
Bachelor of Engineering (Electrical)/Bachelor of Information Technology

Minimum English Requirements
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
</tr>
<tr>
<td>writing</td>
</tr>
<tr>
<td>reading</td>
</tr>
<tr>
<td>listening</td>
</tr>
<tr>
<td>overall</td>
</tr>
</tbody>
</table>

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
Bachelor of Arts/Bachelor of Applied Science

Minimum English Requirements
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking 6.0</td>
</tr>
<tr>
<td>writing 6.0</td>
</tr>
<tr>
<td>reading 6.0</td>
</tr>
<tr>
<td>listening 6.0</td>
</tr>
<tr>
<td>overall 6.5</td>
</tr>
</tbody>
</table>

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**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 1</td>
<td>Major Unit - Arts</td>
</tr>
<tr>
<td></td>
<td>Applied Skills and Scholarship</td>
</tr>
</tbody>
</table>

Two Science units (SC01 Level 1): Foundation units

- **Year 1, Semester 2**
  - Major Unit - Arts
  - Discipline Major Unit or Elective unit
- **Year 2, Semester 1**
  - Major Unit - Arts
  - Discipline Major Unit or Elective unit
- **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)
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.
Bachelor of Corporate Systems Management/Bachelor of Information Technology

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

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB120</td>
<td>Corporate Systems</td>
</tr>
<tr>
<td>INB122</td>
<td>Organisational Databases</td>
</tr>
<tr>
<td>INB101</td>
<td>Impact of IT</td>
</tr>
<tr>
<td>INB102</td>
<td>Emerging Technology</td>
</tr>
<tr>
<td>INB123</td>
<td>Project Management Practice</td>
</tr>
<tr>
<td>BSB115</td>
<td>Management</td>
</tr>
<tr>
<td>INB103</td>
<td>Industry Insights</td>
</tr>
<tr>
<td>INB104</td>
<td>Building IT Systems</td>
</tr>
<tr>
<td>INB220</td>
<td>Business Analysis</td>
</tr>
<tr>
<td>BSB126</td>
<td>Marketing</td>
</tr>
<tr>
<td>IT Breadth Option</td>
<td></td>
</tr>
<tr>
<td>IT Breadth Option</td>
<td></td>
</tr>
<tr>
<td>INB124</td>
<td>Information Systems Development</td>
</tr>
<tr>
<td>MGB223</td>
<td>Entrepreneurship and Innovation</td>
</tr>
<tr>
<td>IT Breadth Option</td>
<td></td>
</tr>
<tr>
<td>IT Breadth Option</td>
<td></td>
</tr>
<tr>
<td>INB322</td>
<td>Information Consulting</td>
</tr>
<tr>
<td>INB221</td>
<td>Technology Management</td>
</tr>
<tr>
<td>INB201</td>
<td>Scalable Systems Development</td>
</tr>
<tr>
<td>IT Specialisation Option</td>
<td></td>
</tr>
<tr>
<td>INB300</td>
<td>Professional Practice in IT</td>
</tr>
<tr>
<td>INB313</td>
<td>Electronic Commerce Site Development</td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
</tr>
<tr>
<td>General Elective</td>
<td></td>
</tr>
<tr>
<td>INB312</td>
<td>Enterprise Systems Applications</td>
</tr>
<tr>
<td>INB325</td>
<td>Corporate Systems Management Project</td>
</tr>
<tr>
<td>INB301</td>
<td>The Business of IT</td>
</tr>
<tr>
<td>IT Specialisation Option</td>
<td></td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IT07&courseID=24231. CRICOS No.00213J
Bachelor of Corporate Systems Management/Bachelor of Games and Interactive Entertainment

**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking: 6.0</td>
</tr>
<tr>
<td>writing: 6.0</td>
</tr>
<tr>
<td>reading: 6.0</td>
</tr>
<tr>
<td>listening: 6.0</td>
</tr>
<tr>
<td>overall: 6.5</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB120</td>
<td>Corporate Systems</td>
</tr>
<tr>
<td>INB103</td>
<td>Industry Insights</td>
</tr>
<tr>
<td>INB180</td>
<td>Computer Games Studies</td>
</tr>
<tr>
<td>INB122</td>
<td>Organisational Databases</td>
</tr>
<tr>
<td>INB120</td>
<td>Game Design and Development</td>
</tr>
<tr>
<td>INB104</td>
<td>Building IT Systems</td>
</tr>
<tr>
<td>INB123</td>
<td>Project Management Practice</td>
</tr>
<tr>
<td>INB181</td>
<td>Introduction to Games Production</td>
</tr>
<tr>
<td>BSB111</td>
<td>Management</td>
</tr>
<tr>
<td>INB126</td>
<td>Marketing</td>
</tr>
<tr>
<td>INB122</td>
<td>Games &amp; Interactive Entertainment Major Unit</td>
</tr>
<tr>
<td>INB101</td>
<td>Impact of IT</td>
</tr>
<tr>
<td>INB122</td>
<td>Games &amp; Interactive Entertainment Major Unit</td>
</tr>
<tr>
<td>INB124</td>
<td>Information Systems Development</td>
</tr>
<tr>
<td>BSB126</td>
<td>Games &amp; Interactive Entertainment Major Unit</td>
</tr>
<tr>
<td>INB220</td>
<td>Business Analysis</td>
</tr>
<tr>
<td>INB221</td>
<td>Technology Management</td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IT096&courseId=24232. CRICOS No.00213J.
<table>
<thead>
<tr>
<th>Year 3, Semester 2</th>
<th>Games &amp; Interactive Entertainment Major Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>MGB223</td>
<td>Entrepreneurship and Innovation</td>
</tr>
<tr>
<td>INB301</td>
<td>The Business of IT</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4, Semester 1</th>
<th>Games &amp; Interactive Entertainment Major Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB379</td>
<td>Game Project Design</td>
</tr>
<tr>
<td>INB322</td>
<td>Information Systems Consulting</td>
</tr>
<tr>
<td>INB312</td>
<td>Enterprise Systems Applications</td>
</tr>
<tr>
<td>INB325</td>
<td>Corporate Systems Management Project</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4, Semester 2</th>
<th>Games &amp; Interactive Entertainment Major Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB380</td>
<td>Games Project</td>
</tr>
<tr>
<td>INB320</td>
<td>Business Process Modelling</td>
</tr>
<tr>
<td>INB313</td>
<td>Electronic Commerce Site Development</td>
</tr>
</tbody>
</table>
### 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

---

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/study/courses/course?courseCode=IX02&courseID=422170. CRICOS No.00213.
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)

<table>
<thead>
<tr>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
<th>Listening</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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.


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 Bellocci
Phone: +61 7 3138 3327
Email: alberto.bellocci@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 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

Mathematics 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
Phone: +61 7 3138 4295
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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/jobs-and-work-experience/work-experience-and-placements/blue-cards.
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

<table>
<thead>
<tr>
<th>Year 1, Semester 1</th>
<th>Year 1, Semester 2</th>
<th>Year 2, Semester 1</th>
<th>Year 2, Semester 2</th>
<th>Year 3, Semester 1</th>
<th>Year 3, Semester 2</th>
<th>Year 4, Semester 1</th>
<th>Year 4, Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Science Major Unit</td>
<td>Science Major Unit</td>
<td>Science Major Unit</td>
<td>Science Major Unit</td>
<td>Science Major Unit</td>
<td>Science Major Unit</td>
<td>Science Major Unit</td>
<td>Science Major Unit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 1</td>
<td>Science Major Unit</td>
<td>Year 2, Semester 1</td>
<td>Teaching and Learning Studies 2: Development and Learning</td>
</tr>
<tr>
<td>EDB002</td>
<td>Teaching and Learning Studies 2: Development and Learning</td>
<td>EDB007</td>
<td>Culture Studies: Indigenous Education</td>
</tr>
<tr>
<td>Curriculum Studies 1X (See List 1)</td>
<td></td>
<td>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).</td>
<td></td>
</tr>
<tr>
<td>EDB031</td>
<td>Secondary Field Studies 1</td>
<td>Year 4, Semester 2</td>
<td>Internship (Secondary)</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 2, Semester 2</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>MDB454</td>
<td>Science, Technology and Society</td>
</tr>
<tr>
<td>Year 3, Semester 1</td>
<td>Curriculum Studies 1Y (See List 1)</td>
</tr>
<tr>
<td>EDB003</td>
<td>Teaching and Learning Studies 3: Practising Education</td>
</tr>
<tr>
<td>EDB032</td>
<td>Secondary Field Studies 2</td>
</tr>
<tr>
<td>Curriculum Studies 2X (See List 2)</td>
<td></td>
</tr>
<tr>
<td>Curriculum Studies 2Y (See List 2)</td>
<td></td>
</tr>
<tr>
<td>Year 4, Semester 1</td>
<td>EDB004</td>
</tr>
<tr>
<td>EDB005</td>
<td>Teaching and Learning Studies 5: Professional Work of Teachers</td>
</tr>
<tr>
<td>EDB007</td>
<td>Culture Studies: Indigenous Education</td>
</tr>
<tr>
<td>Year 4, 6TP4</td>
<td></td>
</tr>
<tr>
<td>EDB034</td>
<td>Secondary Field Studies 4</td>
</tr>
<tr>
<td>EDB035</td>
<td>Internship (Secondary)</td>
</tr>
</tbody>
</table>

Please note that successful completion of all other coursework is required before students can commence the final Field Studies EDB034 and Internship EDB035.

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IX02&courseID=22170. CRICOS No.00213J
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)

<table>
<thead>
<tr>
<th>Skill</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>Writing</td>
<td>6.0</td>
</tr>
<tr>
<td>Reading</td>
<td>6.0</td>
</tr>
<tr>
<td>Listening</td>
<td>6.0</td>
</tr>
<tr>
<td>Overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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/jobbs-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: educationq@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: i.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: i.williamson@qut.edu.au
Alternative phone contact: +61 7 3138 8822
Alternative email contact: sef.enquiry@qut.edu.au

Geoscience Major
Dr Craig Sloss
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

Seminars

<table>
<thead>
<tr>
<th>Year 1, Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDB002</td>
</tr>
<tr>
<td>Science Major Unit</td>
</tr>
<tr>
<td>Science Major Unit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDB021</td>
</tr>
<tr>
<td>Designated Unit: EDB021</td>
</tr>
<tr>
<td>Science Major Unit</td>
</tr>
<tr>
<td>Science Major Unit</td>
</tr>
<tr>
<td>Science Major Unit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2, Semester 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>MDB120</td>
</tr>
<tr>
<td>Science Major Unit</td>
</tr>
<tr>
<td>Science Major Unit</td>
</tr>
<tr>
<td>Science Major Unit</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 2, Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDB025</td>
</tr>
<tr>
<td>Designated Unit: EDB025</td>
</tr>
</tbody>
</table>

Please note that successful completion of all other coursework is required before students can commence the final Internship unit EDB025.
Bachelor of Science/Bachelor of Laws

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

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 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

<table>
<thead>
<tr>
<th>Semesters</th>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 1</td>
<td>Year 1, Semester 1</td>
<td></td>
</tr>
<tr>
<td>Year 1, Semester 2</td>
<td>Year 1, Semester 2</td>
<td></td>
</tr>
<tr>
<td>Year 2, Semester 1</td>
<td>Year 2, Semester 1</td>
<td></td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
<td>Year 2, Semester 2</td>
<td></td>
</tr>
<tr>
<td>Year 3, Semester 1</td>
<td>Year 3, Semester 1</td>
<td></td>
</tr>
<tr>
<td>Year 3, Semester 2</td>
<td>Year 3, Semester 2</td>
<td></td>
</tr>
<tr>
<td>Year 4, Semester 1</td>
<td>Year 4, Semester 1</td>
<td></td>
</tr>
<tr>
<td>Year 4, Semester 2</td>
<td>Year 4, Semester 2</td>
<td></td>
</tr>
<tr>
<td>Year 5, Semester 1</td>
<td>Year 5, Semester 1</td>
<td></td>
</tr>
<tr>
<td>Year 5, Semester 2</td>
<td>Year 5, Semester 2</td>
<td></td>
</tr>
<tr>
<td>Year 6, Semester 1</td>
<td>Year 6, Semester 1</td>
<td></td>
</tr>
</tbody>
</table>
### Bachelor of Science/Bachelor of Laws

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Name</th>
<th>Year, Semester</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEB101</td>
<td>Science in Context</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEB102</td>
<td>Understanding Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEB113</td>
<td>Quantitative Methods in Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SEB114</td>
<td>Experimental Science</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LWB145</td>
<td>Legal Foundations A</td>
<td>Year 1, Semester 2</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>LWB147</td>
<td>Torts A</td>
<td></td>
<td>Science Major Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LWB146</td>
<td>Legal Foundations B</td>
<td>Year 2, Semester 1</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>LWB148</td>
<td>Torts B</td>
<td></td>
<td>Science Major Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LWB136</td>
<td>Contracts A</td>
<td>Year 2, Semester 2</td>
<td>Law Elective</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Science Major Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Science Major Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LWB137</td>
<td>Contracts B</td>
<td>Year 3, Semester 1</td>
<td>Law Elective</td>
</tr>
<tr>
<td>LWB238</td>
<td>Fundamentals of Criminal Law</td>
<td></td>
<td>Science Major Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Science Major Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LWB239</td>
<td>Criminal Responsibility</td>
<td>Year 3, Semester 2</td>
<td>Law Elective</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Science Major Unit</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Science Major Unit (Capstone)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LWB240</td>
<td>Principles of Equity</td>
<td>Year 4, Semester 1</td>
<td>Law Elective</td>
</tr>
<tr>
<td>LWB242</td>
<td>Constitutional Law</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LWB243</td>
<td>Property Law A</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LWB244</td>
<td>Property Law B</td>
<td>Year 4, Semester 2</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LWB335</td>
<td>Administrative Law</td>
<td>Year 5, Semester 1</td>
<td>Law Elective</td>
</tr>
<tr>
<td>LWB431</td>
<td>Civil Procedure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LWB432</td>
<td>Evidence</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LWB334</td>
<td>Corporate Law</td>
<td>Year 5, Semester 2</td>
<td>Law Elective</td>
</tr>
<tr>
<td>LWB433</td>
<td>Professional Responsibility</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Year 6, Semester 1</td>
<td>Law Elective</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Science/Bachelor of Business

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>speaking</th>
<th>6.0</th>
</tr>
</thead>
<tbody>
<tr>
<td>writing</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
<td></td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
<td></td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Semesters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 1</td>
</tr>
<tr>
<td>Year 1, Semester 2</td>
</tr>
<tr>
<td>Year 2, Semester 1</td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
</tr>
<tr>
<td>Year 3, Semester 1</td>
</tr>
<tr>
<td>Year 3, Semester 2</td>
</tr>
<tr>
<td>Year 4, Semester 1</td>
</tr>
<tr>
<td>Year 4, Semester 2</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEB101</td>
<td>Science in Context</td>
</tr>
<tr>
<td>SEB102</td>
<td>Understanding Science</td>
</tr>
<tr>
<td>SEB113</td>
<td>Quantitative Methods in Science</td>
</tr>
<tr>
<td>SEB114</td>
<td>Experimental Science</td>
</tr>
<tr>
<td>SEB105</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB106</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB107</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB108</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB109</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB110</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB111</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB112</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB113</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB114</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB115</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB116</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB117</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB118</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB119</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>SEB120</td>
<td>Science Major Unit</td>
</tr>
<tr>
<td>Year 4, Semester 1</td>
<td></td>
</tr>
<tr>
<td>-------------------</td>
<td>---</td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Year 4, Semester 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
</tbody>
</table>
### Bachelor of Applied Science/Bachelor of Information Technology

**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.
Bachelor of Creative Industries/Bachelor of Information Technology

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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).
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 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. 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

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, 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

Bachelor of Information Technology/Bachelor of Mathematics

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)

Minimum English Requirements
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
</tr>
<tr>
<td>writing</td>
</tr>
<tr>
<td>reading</td>
</tr>
<tr>
<td>listening</td>
</tr>
<tr>
<td>overall</td>
</tr>
</tbody>
</table>

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 form 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
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.

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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IX31&courseID=21592. CRICOS No.00213J
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

Sample Structure

Semesters

- Year 1 Semester 1
- Year 1 Semester 2
- Year 2 Semester 1
- Year 2 Semester 2
- Year 3 Semester 1
- Year 3 Semester 2
- Year 4 Semester 1
- Year 4 Semester 2
## Bachelor of Business/Bachelor of Mathematics

### 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

### 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)

### 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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
<th>Listening</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

### 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
    - 6 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
Bachelor of Business/Bachelor of Mathematics

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.

Sample Structure

Semesters

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1 Semester 1</td>
<td></td>
</tr>
<tr>
<td>Business School Core Unit</td>
<td></td>
</tr>
<tr>
<td>Business School Core Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Year 1 Semester 2</td>
<td></td>
</tr>
<tr>
<td>Business School Core Unit</td>
<td></td>
</tr>
<tr>
<td>Business School Core Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Year 2 Semester 1</td>
<td></td>
</tr>
<tr>
<td>Business School Core Unit</td>
<td></td>
</tr>
<tr>
<td>Business School Core Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Year 2 Semester 2</td>
<td></td>
</tr>
<tr>
<td>Business School Core Unit</td>
<td></td>
</tr>
<tr>
<td>Business School Core Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Year 3 Semester 1</td>
<td></td>
</tr>
<tr>
<td>Business School Major Unit</td>
<td></td>
</tr>
<tr>
<td>Business School Major Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Year 3 Semester 2</td>
<td></td>
</tr>
<tr>
<td>Business School Major Unit</td>
<td></td>
</tr>
<tr>
<td>Business School Major Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
</tbody>
</table>

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)
Minimum english requirements
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
<th>Listening</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Sample Structure

Semesters

- **YEAR 1 SEMESTER 1**
  - Code: INB103, Title: Industry Insights
  - Code: INB250, Title: Foundations of Computer Science

- **YEAR 1 SEMESTER 2**
  - Code: INB210, Title: Databases
  - Code: INB251, Title: Networks

- **YEAR 2 SEMESTER 1**
  - Code: INB104, Title: Building IT Systems
    - Choose one unit from: Intermediate Level Elective list. This choice will replace ITB008 from 2009 course summary.

- **YEAR 2 SEMESTER 2**
  - Code: INB270, Title: Programming
  - Code: INB271, Title: The Web

- **YEAR 3 SEMESTER 1**
  - Code: IT Major Unit
  - Code: IT Major Unit
  - Code: Major unit

- **YEAR 3 SEMESTER 2**
  - Code: INB301, Title: The Business of IT

- **YEAR 4 SEMESTER 1**
  - Code: IT Major Unit

- **YEAR 4 SEMESTER 2**
  - Code: IT Major Unit
  - Code: Discpline or Minor unit or Elective unit

- **YEAR 4 SEMESTER 2**
  - Code: Elective unit
  - Code: Discipline unit or Elective unit

- **YEAR 4 SEMESTER 2**
  - Code: IT Major Unit

- **YEAR 4 SEMESTER 2**
  - Code: Elective unit
  - Code: Discipline unit or Elective unit
Bachelor of Information Technology/Bachelor of Laws

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)

<table>
<thead>
<tr>
<th>Speaking</th>
<th>Listening</th>
<th>Reading</th>
<th>Writing</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

Career Outcomes
Graduates may develop careers in cyberlaw, intellectual property and privacy, dealing with the legal regulation of the Internet including downloading music, mobile phone camera use or copyright issues. You may become a legal practitioner, barrister, in-house counsel, government lawyer or policy adviser. There is also increased demand for roles in edemocracy both in egovernment service delivery and political campaigning.

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 Resolution
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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IX53&courseID=23970. CRICOS No.00213J.
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)

<table>
<thead>
<tr>
<th>Component</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>Writing</td>
<td>6.0</td>
</tr>
<tr>
<td>Reading</td>
<td>6.0</td>
</tr>
<tr>
<td>Listening</td>
<td>6.0</td>
</tr>
<tr>
<td>Overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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.

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.

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IX54&courseID=22290. CRICOS No.00213J
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**
  - 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

---

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=IX54&courseID=22290. CRICOS No.00213J](http://www.student.qut.edu.au/studying/courses/course?courseCode=IX54&courseID=22290. CRICOS No.00213J)
Bachelor of Applied Science/Bachelor of Information Technology

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 physic major - Maths C.

Minimum English proficiency 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 B/IT 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:

**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

**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

**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

**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  
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

**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**

<table>
<thead>
<tr>
<th>Semester</th>
<th>Courses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year 1, Semester 1</strong></td>
<td>INB101 Impact of IT</td>
</tr>
<tr>
<td><strong>Year 1, Semester 2</strong></td>
<td>INB102 Emerging Technology</td>
</tr>
<tr>
<td><strong>Year 2, Semester 1</strong></td>
<td>Science Core Unit</td>
</tr>
<tr>
<td><strong>Year 2, Semester 2</strong></td>
<td>Science Core Unit</td>
</tr>
<tr>
<td><strong>Year 3, Semester 1</strong></td>
<td>IT Breadth Unit Option</td>
</tr>
<tr>
<td><strong>Year 3, Semester 2</strong></td>
<td>Science Core Unit</td>
</tr>
<tr>
<td><strong>Year 4, Semester 1</strong></td>
<td>Science Core Unit</td>
</tr>
<tr>
<td><strong>Year 4, Semester 2</strong></td>
<td>Science Core Unit</td>
</tr>
</tbody>
</table>
Handbook

Bachelor of Creative Industries/Bachelor of Information Technology

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUT code</td>
<td>IX56</td>
</tr>
<tr>
<td>CRICOS</td>
<td>059227E</td>
</tr>
<tr>
<td>Duration (full-time)</td>
<td>4 years</td>
</tr>
<tr>
<td>OP</td>
<td>10</td>
</tr>
<tr>
<td>Rank</td>
<td>80</td>
</tr>
<tr>
<td>OP Guarantee</td>
<td>Yes</td>
</tr>
<tr>
<td>Campus</td>
<td>Gardens Point and Kelvin Grove</td>
</tr>
<tr>
<td>Domestic fee (indicative)</td>
<td>2013: CSP $3900 per Semester (48 credit points)</td>
</tr>
<tr>
<td>International fee (indicative)</td>
<td>2013: $11,700 per Semester</td>
</tr>
<tr>
<td>Total credit points</td>
<td>384</td>
</tr>
<tr>
<td>Credit points full-time sem.</td>
<td>48</td>
</tr>
<tr>
<td>Start months</td>
<td>February</td>
</tr>
<tr>
<td>Int. Start Months</td>
<td>February</td>
</tr>
</tbody>
</table>

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 Cl: 07 3138 8114 c@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

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
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

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.

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 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
Year 2, Semester 2
IT Breadth Option 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
Bachelor of Information Technology/Bachelor of Mathematics

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:

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IX57&courseID=42856. CRICOS No.00213J
Bachelor of Information Technology/Bachelor of Mathematics

**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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
</table>
| 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 2, Semester 1
| INB103 | Industry Insights                                                    |
| INB104 | Building IT Systems                                                  |
| MAB210 | Probability and Stochastic Modelling 1                               |
| MAB220 | Computational Mathematics 1                                          |

This information is correct as at 19/12/2013. For the most up-to-date course information, visit [http://www.student.qut.edu.au/studying/courses/course?courseCode=IX57&courseID=22856. CRICOS No.00213J](http://www.student.qut.edu.au/studying/courses/course?courseCode=IX57&courseID=22856. CRICOS No.00213J).
Bachelor of Business/Bachelor of Information Technology

| 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) |

### 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


### 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 Energe, 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.
Bachelor of Business/Bachelor of Information Technology

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


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


Sample Structure

Semesters

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB101</td>
<td>Impact of IT</td>
</tr>
<tr>
<td>INB102</td>
<td>Emerging Technology</td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>INB103</td>
<td>Industry Insights</td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>INB104</td>
<td>Building IT Systems</td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>INB201</td>
<td>Scalable Systems Development</td>
</tr>
<tr>
<td>INB201 can only be taken after you have completed a minimum of 36 credit points of breadth units.</td>
<td></td>
</tr>
<tr>
<td>IT Specialist Option Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>INB300</td>
<td>Professional Practice in IT</td>
</tr>
<tr>
<td>INB300 and INB301 can only be taken after you have completed a minimum of 192 credit points of study.</td>
<td></td>
</tr>
<tr>
<td>IT Specialist Option Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>INB301</td>
<td>The Business of IT</td>
</tr>
<tr>
<td>INB300 and INB301 can only be taken after a student has completed a minimum of 168 credit points of study.</td>
<td></td>
</tr>
<tr>
<td>IT Specialist Option Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Title</td>
</tr>
<tr>
<td>------</td>
<td>-------</td>
</tr>
<tr>
<td>INB302</td>
<td>IT Capstone Project</td>
</tr>
<tr>
<td>INB301 must be completed before enrolling in INB302.</td>
<td></td>
</tr>
<tr>
<td>IT Specialist Option Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
<tr>
<td>Business Unit</td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Corporate Systems Management/Bachelor of Justice

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: 128
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
Email: 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.

Further 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
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.

**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**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB120</td>
<td>Corporate Systems</td>
</tr>
<tr>
<td>INB103</td>
<td>Industry Insights</td>
</tr>
<tr>
<td>JSB170</td>
<td>Introduction to Criminology and Policing</td>
</tr>
<tr>
<td>JSB171</td>
<td>Justice and Society</td>
</tr>
<tr>
<td>BSB115</td>
<td>Management</td>
</tr>
<tr>
<td>INB123</td>
<td>Project Management Practice</td>
</tr>
<tr>
<td>JSB173</td>
<td>Understanding the Criminal Justice System</td>
</tr>
<tr>
<td>JSB174</td>
<td>Forensic Psychology and the Law</td>
</tr>
<tr>
<td>INB101</td>
<td>Impact of IT</td>
</tr>
<tr>
<td>INB122</td>
<td>Organisational Databases</td>
</tr>
<tr>
<td>JSB172</td>
<td>Professional Criminological Research Skills</td>
</tr>
<tr>
<td>JSB175</td>
<td>Social Ethics and the Justice System</td>
</tr>
<tr>
<td>INB124</td>
<td>Information Systems Development</td>
</tr>
<tr>
<td>INB313</td>
<td>Electronic Commerce Site Development</td>
</tr>
<tr>
<td></td>
<td>Policy Governance and Justice</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>INB220</td>
<td>Business Analysis</td>
</tr>
<tr>
<td>INB221</td>
<td>Technology Management</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>JSB288</td>
<td>Punishment and Judicial Practice</td>
</tr>
<tr>
<td>JSB289</td>
<td>Police and Crime Prevention</td>
</tr>
<tr>
<td>JSB290</td>
<td>Gender and the Criminal Justice System</td>
</tr>
<tr>
<td>JSB291</td>
<td>Gender Crime and the Criminal Justice System</td>
</tr>
<tr>
<td>JSB292</td>
<td>Transnational Organised Crime and Terrorism</td>
</tr>
<tr>
<td>JSB293</td>
<td>Independent Study</td>
</tr>
<tr>
<td>JSB294</td>
<td>Independent Study</td>
</tr>
<tr>
<td>JSB295</td>
<td>Justice Study Area A Unit from list below</td>
</tr>
<tr>
<td></td>
<td>(Criminology and Policing or Policy and Governance)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>JSB296</td>
<td>Justice Study Area A Unit from list below</td>
</tr>
<tr>
<td></td>
<td>(Criminology and Policing or Policy and Governance)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>JSB297</td>
<td>Justice Study Area A Unit from list below</td>
</tr>
<tr>
<td></td>
<td>(Criminology and Policing or Policy and Governance)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>JSB298</td>
<td>Justice Study Area A Unit from list below</td>
</tr>
<tr>
<td></td>
<td>(Criminology and Policing or Policy and Governance)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>JSB299</td>
<td>Justice Study Area A Unit from list below</td>
</tr>
<tr>
<td></td>
<td>(Criminology and Policing or Policy and Governance)</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Business/Bachelor of Corporate Systems Management

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)

<table>
<thead>
<tr>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
<th>Listening</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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 Energe, 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 1055
Fax: +61 7 3138 2050
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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>INB103</td>
<td>Industry Insights</td>
</tr>
<tr>
<td>INB120</td>
<td>Corporate Systems</td>
</tr>
</tbody>
</table>
Bachelor of Business/Bachelor of Games and Interactive Entertainment

Handbook

<table>
<thead>
<tr>
<th>Year</th>
<th>2013</th>
</tr>
</thead>
<tbody>
<tr>
<td>QUT code</td>
<td>IX63</td>
</tr>
<tr>
<td>CRICOS</td>
<td>063024D</td>
</tr>
<tr>
<td>Duration (full-time)</td>
<td>4 years</td>
</tr>
<tr>
<td>OP</td>
<td>9</td>
</tr>
<tr>
<td>Rank</td>
<td>82</td>
</tr>
<tr>
<td>OP Guarantee</td>
<td>Yes</td>
</tr>
<tr>
<td>Campus</td>
<td>Gardens Point</td>
</tr>
<tr>
<td>Domestic fee (indicative)</td>
<td>2013: CSP $4600 per Semester (48 credit points)</td>
</tr>
<tr>
<td>International fee (indicative)</td>
<td>2013: $11,700 per Semester</td>
</tr>
<tr>
<td>Total credit points</td>
<td>384</td>
</tr>
<tr>
<td>Credit points full-time sem.</td>
<td>48</td>
</tr>
<tr>
<td>Start months</td>
<td>February</td>
</tr>
<tr>
<td>Int. Start Months</td>
<td>February</td>
</tr>
<tr>
<td>Deferment</td>
<td>You can defer your offer and postpone the start of your course for one year</td>
</tr>
<tr>
<td>Course Coordinator</td>
<td>Michael Docherty (Games and Interactive Entertainment); Director of Undergraduate Studies, QUT Business School; email: <a href="mailto:bus@qut.edu.au">bus@qut.edu.au</a></td>
</tr>
<tr>
<td>Discipline Coordinator</td>
<td>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)</td>
</tr>
</tbody>
</table>

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)

<table>
<thead>
<tr>
<th>Component</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>Writing</td>
<td>6.0</td>
</tr>
<tr>
<td>Reading</td>
<td>6.0</td>
</tr>
<tr>
<td>Listening</td>
<td>6.0</td>
</tr>
<tr>
<td>Overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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 Energetx, 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 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 concurrently.
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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 1</td>
<td>Business School Core Unit - See Appendix 1</td>
</tr>
<tr>
<td></td>
<td>Business School Core Unit - See Appendix 1</td>
</tr>
<tr>
<td>INB180</td>
<td>Computer Games Studies</td>
</tr>
<tr>
<td>INB182</td>
<td>Introducing Design</td>
</tr>
<tr>
<td>Year 1, Semester 2</td>
<td>Business School Core Unit - See Appendix 1</td>
</tr>
<tr>
<td></td>
<td>Business School Core Unit - See Appendix 1</td>
</tr>
<tr>
<td>INB181</td>
<td>Introduction to Games Production</td>
</tr>
<tr>
<td>INB104</td>
<td>Building IT Systems</td>
</tr>
<tr>
<td></td>
<td>The ITB002 unit is currently under review; further information will be available in August 2009.</td>
</tr>
<tr>
<td>Year 2, Semester 1</td>
<td>Business School Core Unit - See Appendix 1</td>
</tr>
<tr>
<td></td>
<td>Business School Core Unit - See Appendix 1</td>
</tr>
<tr>
<td>INB103</td>
<td>Industry Insights</td>
</tr>
<tr>
<td>Games &amp; Interactive Entertain Major Unit</td>
<td></td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
<td>Business School Core Unit - See Appendix</td>
</tr>
<tr>
<td></td>
<td>Business School Core Unit - See Appendix</td>
</tr>
<tr>
<td>Games &amp; Interactive Entertain Major Unit</td>
<td></td>
</tr>
<tr>
<td>Games &amp; Interactive Entertain Major Unit</td>
<td></td>
</tr>
<tr>
<td>Year 3, Semester 1</td>
<td>Business School Major Unit - See Appendix</td>
</tr>
<tr>
<td></td>
<td>Business School Major Unit - See Appendix</td>
</tr>
<tr>
<td>Games &amp; Interactive Entertain Major Unit</td>
<td></td>
</tr>
<tr>
<td>Games &amp; Interactive Entertain Major Unit</td>
<td></td>
</tr>
<tr>
<td>Year 3, Semester 2</td>
<td>Business School Major Unit - See Appendix</td>
</tr>
<tr>
<td></td>
<td>Business School Major Unit - See Appendix</td>
</tr>
<tr>
<td>Games &amp; Interactive Entertain Major Unit</td>
<td></td>
</tr>
<tr>
<td>Games &amp; Interactive Entertain Major Unit</td>
<td></td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IX63&courseID=21231. CRICOS No.00213J
Bachelor of Games and Interactive Entertainment/Bachelor of Mathematics

**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
</tr>
<tr>
<td>writing</td>
</tr>
<tr>
<td>reading</td>
</tr>
<tr>
<td>listening</td>
</tr>
<tr>
<td>overall</td>
</tr>
</tbody>
</table>

**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
Phone: +61 7 3138 8822
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

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**
  - 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
  - MAB220 Computational Mathematics 1

- **Year 2, Semester 1**
  - INB103 Industry Insights
  - Games & Interactive Entertain Major Unit
  - MAB312 Linear Algebra

- **Year 2, Semester 2**
  - Games & Interactive Entertain Major Unit
  - Games & Interactive Entertain Major 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

- **Year 4, Semester 1**
  - INB379 Game Project Design
  - Games & Interactive Entertain Major
  - Level 2 or 3 Maths Unit

- **Year 4, Semester 2**
  - INB380 Games Project

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IX64&courseID=22855. CRICOS No.00213J
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)

<table>
<thead>
<tr>
<th>Skill</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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 Enerex, 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
Email: sef.enquiry@qut.edu.au

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
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

Sample Structure

<table>
<thead>
<tr>
<th>Semesters</th>
<th>Code</th>
<th>Title</th>
<th>Year 1, Semester 1</th>
<th>Year 1, Semester 2</th>
<th>Year 2, Semester 1</th>
<th>Year 2, Semester 2</th>
<th>Year 3, Semester 1</th>
<th>Year 3, Semester 2</th>
<th>Year 4, Semester 1</th>
<th>Year 4, Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample Structure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Bachelor of Fine Arts (Interactive and Visual Design)/Bachelor of Information Technology

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)

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)

<table>
<thead>
<tr>
<th>Component</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>Writing</td>
<td>6.0</td>
</tr>
<tr>
<td>Reading</td>
<td>6.0</td>
</tr>
<tr>
<td>Listening</td>
<td>6.0</td>
</tr>
<tr>
<td>Overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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) and achieve a GPA of 5.5 or greater may apply for entry into the Master of Information Technology (Research). The program is designed for students who have completed a Bachelor of Information Technology (or equivalent) degree and are seeking to pursue advanced studies in information technology.

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 to spend 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 Energea, 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.

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IX69&courseID=24338. CRICOS No.00213J.
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 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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB101</td>
<td>Impact of IT</td>
</tr>
<tr>
<td>INB102</td>
<td>Emerging Technology</td>
</tr>
<tr>
<td>KIB100</td>
<td>Design and Creative Thinking</td>
</tr>
<tr>
<td>KIB101</td>
<td>Visual Communication</td>
</tr>
<tr>
<td>INB103</td>
<td>Industry Insights</td>
</tr>
<tr>
<td>INB104</td>
<td>Building IT Systems</td>
</tr>
<tr>
<td>KIB109</td>
<td>Design for Interactive Media</td>
</tr>
<tr>
<td>KIB120</td>
<td>Graphic Design</td>
</tr>
<tr>
<td>KIB123</td>
<td>Animation and Motion Graphics</td>
</tr>
<tr>
<td>KIB102</td>
<td>Visual Interactions</td>
</tr>
<tr>
<td>KIB204</td>
<td>Web Interface Design</td>
</tr>
<tr>
<td>KIB231</td>
<td>Typography and Illustration</td>
</tr>
<tr>
<td>INB201</td>
<td>Scalable Systems Development</td>
</tr>
<tr>
<td>INB300</td>
<td>Professional Practice in IT</td>
</tr>
<tr>
<td>KIB207</td>
<td>Theories of Visual Communication</td>
</tr>
<tr>
<td>KIB216</td>
<td>Advanced Web Design</td>
</tr>
<tr>
<td>INB301</td>
<td>The Business of IT</td>
</tr>
<tr>
<td>KIB315</td>
<td>Contemporary Issues in Digital Media</td>
</tr>
</tbody>
</table>

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

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

Creative Industries Coordinator
Phone +61 7 3138 8114
Fax +61 7 3138 8116
Email: creativeindustries@qut.edu.au

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

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

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

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 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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INB101</td>
<td>Impact of IT</td>
</tr>
<tr>
<td>INB102</td>
<td>Emerging Technology</td>
</tr>
<tr>
<td>KIB100</td>
<td>Design and Creative Thinking</td>
</tr>
<tr>
<td>KIB101</td>
<td>Visual Communication</td>
</tr>
<tr>
<td>INB103</td>
<td>Industry Insights</td>
</tr>
<tr>
<td>INB104</td>
<td>Building IT Systems</td>
</tr>
<tr>
<td>KIB109</td>
<td>Design for Interactive Media</td>
</tr>
<tr>
<td>KIB120</td>
<td>Graphic Design</td>
</tr>
<tr>
<td>KIB123</td>
<td>Animation and Motion Graphics</td>
</tr>
<tr>
<td>KIB102</td>
<td>Visual Interactions</td>
</tr>
<tr>
<td>KIB204</td>
<td>Web Interface Design</td>
</tr>
<tr>
<td>KIB231</td>
<td>Typography and Illustration</td>
</tr>
<tr>
<td>INB201</td>
<td>Scalable Systems Development</td>
</tr>
<tr>
<td>INB300</td>
<td>Professional Practice in IT</td>
</tr>
<tr>
<td>KIB207</td>
<td>Theories of Visual Communication</td>
</tr>
<tr>
<td>KIB216</td>
<td>Advanced Web Design</td>
</tr>
<tr>
<td>INB301</td>
<td>The Business of IT</td>
</tr>
<tr>
<td>KIB315</td>
<td>Contemporary Issues in Digital Media</td>
</tr>
</tbody>
</table>

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
### Bachelor of Applied Science/Bachelor of Laws

<table>
<thead>
<tr>
<th>Handbook</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
</tr>
<tr>
<td><strong>QUT code</strong></td>
</tr>
<tr>
<td><strong>CRICOS</strong></td>
</tr>
<tr>
<td><strong>Duration (full-time)</strong></td>
</tr>
<tr>
<td><strong>OP</strong></td>
</tr>
<tr>
<td><strong>Rank</strong></td>
</tr>
<tr>
<td><strong>OP Guarantee</strong></td>
</tr>
<tr>
<td><strong>Campus</strong></td>
</tr>
<tr>
<td><strong>Domestic fee (indicative)</strong></td>
</tr>
<tr>
<td><strong>International fee (indicative)</strong></td>
</tr>
<tr>
<td><strong>Total credit points</strong></td>
</tr>
<tr>
<td><strong>Credit points full-time sem.</strong></td>
</tr>
<tr>
<td><strong>Start months</strong></td>
</tr>
<tr>
<td><strong>Int. Start Months</strong></td>
</tr>
<tr>
<td><strong>Deferment</strong></td>
</tr>
</tbody>
</table>

### 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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

### 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
  - 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

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IX72&courseID=22150. CRICOS No.00213J
Bachelor of Applied Science/Bachelor of Laws

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IX72&courseID=22150. CRICOS No.00213J

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

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.

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.
Bachelor of Applied Science/Bachelor of Mathematics

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 biochemistry, biotechnology, chemistry, ecology, environmental science, forensic science, geoscience, microbiology and physics.

Minimum English requirements
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
</tr>
<tr>
<td>writing</td>
</tr>
<tr>
<td>reading</td>
</tr>
<tr>
<td>listening</td>
</tr>
<tr>
<td>overall</td>
</tr>
</tbody>
</table>

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:
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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB110</td>
<td>Science Concepts and Global Systems</td>
</tr>
<tr>
<td>SCB111</td>
<td>Chemistry 1</td>
</tr>
<tr>
<td></td>
<td>Cellular Basis of Life</td>
</tr>
</tbody>
</table>

In addition, students are required to complete any mandatory units - and should complete all recommended units, specified for the science major selected.

**Level 1 Units:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAB101</td>
<td>Statistical Data Analysis 1</td>
</tr>
<tr>
<td>MAB120</td>
<td>Foundations of Calculus and Algebra</td>
</tr>
<tr>
<td>MAB121</td>
<td>Single Variable Calculus and Differential Equations</td>
</tr>
<tr>
<td>MAB122</td>
<td>Linear Algebra and Multivariable Calculus</td>
</tr>
<tr>
<td>MAB210</td>
<td>Probability and Stochastic Modelling 1</td>
</tr>
<tr>
<td>MAB220</td>
<td>Computational Mathematics 1</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SCB110</td>
<td>Science Concepts and Global Systems</td>
</tr>
<tr>
<td>SCB111</td>
<td>Chemistry 1</td>
</tr>
</tbody>
</table>

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:**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAB311</td>
<td>Advanced Calculus</td>
</tr>
<tr>
<td>MAB312</td>
<td>Linear Algebra</td>
</tr>
</tbody>
</table>

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.

**Science Elective Units:**

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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>MAB311</td>
<td>Advanced Calculus</td>
</tr>
<tr>
<td>MAB312</td>
<td>Linear Algebra</td>
</tr>
</tbody>
</table>

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.
Bachelor of Science/Bachelor of Mathematics

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
</tr>
<tr>
<td>writing</td>
</tr>
<tr>
<td>reading</td>
</tr>
<tr>
<td>listening</td>
</tr>
<tr>
<td>overall</td>
</tr>
</tbody>
</table>

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
Bachelor of Science/Bachelor of Mathematics

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**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>SEB101</td>
<td>Science in Context</td>
</tr>
<tr>
<td>SEB102</td>
<td>Understanding Science</td>
</tr>
<tr>
<td>SEB113</td>
<td>Quantitative Methods in Science</td>
</tr>
<tr>
<td>SEB114</td>
<td>Experimental Science</td>
</tr>
<tr>
<td><strong>Year 1 Semester 2</strong></td>
<td></td>
</tr>
<tr>
<td>MAB120</td>
<td>Foundations of Calculus and Algebra</td>
</tr>
<tr>
<td>Science Major Unit</td>
<td></td>
</tr>
<tr>
<td>Science Major Unit</td>
<td></td>
</tr>
<tr>
<td>Science Core Options Unit</td>
<td></td>
</tr>
<tr>
<td><strong>Year 2 Semester 1</strong></td>
<td></td>
</tr>
<tr>
<td>MAB121</td>
<td>Single Variable Calculus and Differential Equations</td>
</tr>
<tr>
<td>MAB122</td>
<td>Linear Algebra and Multivariable Calculus</td>
</tr>
<tr>
<td>Science Major Unit</td>
<td></td>
</tr>
<tr>
<td>Science Major Unit</td>
<td></td>
</tr>
<tr>
<td><strong>Year 2 Semester 2</strong></td>
<td></td>
</tr>
<tr>
<td>Science Major Unit</td>
<td></td>
</tr>
<tr>
<td>Science Major Unit</td>
<td></td>
</tr>
<tr>
<td><strong>Year 3 Semester 1</strong></td>
<td></td>
</tr>
<tr>
<td>MAB311</td>
<td>Advanced Calculus</td>
</tr>
<tr>
<td>MAB312</td>
<td>Linear Algebra</td>
</tr>
<tr>
<td>Science Major Unit</td>
<td></td>
</tr>
<tr>
<td>Science Major Unit</td>
<td></td>
</tr>
<tr>
<td><strong>Year 3 Semester 2</strong></td>
<td></td>
</tr>
<tr>
<td>Science Major Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td><strong>Year 4 Semester 1</strong></td>
<td></td>
</tr>
<tr>
<td>Science Core Options Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td><strong>Year 4 Semester 2</strong></td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
<tr>
<td>Mathematics Unit</td>
<td></td>
</tr>
</tbody>
</table>

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=SE20&courseID=25390. CRICOS No.00213J
Bachelor of Applied Science (Honours)

OR

**Elective**

<table>
<thead>
<tr>
<th>Year 1, Semester 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>HLP102 Research Seminars</td>
</tr>
<tr>
<td>HLP103-2 Dissertation</td>
</tr>
</tbody>
</table>

OR

**Elective**

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HLP103-3 Dissertation</td>
</tr>
<tr>
<td>HLP103-4 Dissertation</td>
</tr>
</tbody>
</table>

**Electives**

<p>| |</p>
<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
</table>
| Dissertation     | 48 credit points

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.
Domestic Entry requirements 2013 questionnaires have closed

Questionnaires for the 2013 intake were due to be 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 (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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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
• 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.
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
- 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.
Bachelor of Games and Interactive Entertainment - Dean’s Scholars Program

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Refer to IT04 course structure.
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.

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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

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

International fee (indicative)
2013: $11,800 per Semester

Total credit points
Start months
February
Fixed closing date - 16 November 2012.

Domestic Entry requirements
OP 1
Rank 99
Campus Gardens Point
Domestic fee (indicative)
2013: CSP $4400 per Semester (48 credit points)
Duration (full-time) 3 years

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

Course Coordinator Richard Thomas
Discipline Coordinator

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=IT06&courseID=23050. CRICOS No.00213J
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 Assistant 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 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
more 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.

**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 CoopEd students have worked with include Energex, Boeing, CITEC, CSR 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.

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Course Notes
Minimum english requirements
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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.
<table>
<thead>
<tr>
<th>Block B or Block C Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN Unit</td>
</tr>
</tbody>
</table>

**Year 3, Semester 2**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN700</td>
<td>Introduction To Research</td>
</tr>
<tr>
<td>INN Elective</td>
<td></td>
</tr>
<tr>
<td>INN401</td>
<td>Honours Dissertation 1</td>
</tr>
</tbody>
</table>

**Year 3, Summer**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN402</td>
<td>Honours Dissertation 2</td>
</tr>
<tr>
<td>INN403</td>
<td>Honours Dissertation 3</td>
</tr>
<tr>
<td>INN404</td>
<td>Honours Dissertation 4</td>
</tr>
</tbody>
</table>
Bachelor of Information Technology (Honours)

Entrance Requirements

**Domestic Entry requirements**

**Entry Requirements**
Applications 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**
Applications 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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking 6.0</td>
</tr>
<tr>
<td>writing 6.0</td>
</tr>
<tr>
<td>reading 6.0</td>
</tr>
<tr>
<td>listening 6.0</td>
</tr>
<tr>
<td>overall 6.5</td>
</tr>
</tbody>
</table>

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 procedures, 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 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.

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

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>INN700</td>
<td>Introduction To Research</td>
</tr>
<tr>
<td>INN401</td>
<td>Honours Dissertation 1</td>
</tr>
<tr>
<td>INN701</td>
<td>Advanced Research Topics</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
</tr>
<tr>
<td>INN402</td>
<td>Honours Dissertation 2</td>
</tr>
<tr>
<td>INN403</td>
<td>Honours Dissertation 3</td>
</tr>
<tr>
<td>INN404</td>
<td>Honours Dissertation 4</td>
</tr>
<tr>
<td></td>
<td>Elective</td>
</tr>
<tr>
<td>INN700</td>
<td>Introduction To Research</td>
</tr>
<tr>
<td>INN401</td>
<td>Honours Dissertation 1</td>
</tr>
<tr>
<td>Year 1, Semester 1</td>
<td></td>
</tr>
<tr>
<td>Year 1, Semester 2</td>
<td></td>
</tr>
<tr>
<td>Year 2, Semester 1</td>
<td></td>
</tr>
<tr>
<td>Year 2, Semester 2</td>
<td></td>
</tr>
</tbody>
</table>
Minimum English Requirements
Students must meet the English proficiency requirements.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
<th>Listening</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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.
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.

Further Information
For further information about this course, please contact:
Dr Jinglian 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.

A through 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.

A through 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
- Year 3, Semester 2*
- Year 3, Semester 3
- Year 4, Semester 1

Code | Title
--- | ---
Year 3, Semester 2 | Elective
INN700 | Introduction To Research
INN401 | Honours Dissertation 1
INN701 | Advanced Research Topics

Year 3, Semester 3 | Elective
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 pointsHonours 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 their 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*
INN700 | Introduction To Research
INN401 | Honours Dissertation 1
INN402 | Honours Dissertation 2
INN701 | Advanced Research Topics

Year 4, Semester 1 | Elective
INN403 | Honours Dissertation 3
INN404 | Honours Dissertation 4

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 pointsHonours 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 their Course Coordinator. Students should note that many electives might be offered in the evenings only.

Please note: tuition fees normally apply for Summer enrolment.
Bachelor of Mathematics & Bachelor of Applied Science (Honours) - Dean's Scholars Honours Program

<table>
<thead>
<tr>
<th>Handbook</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Year</strong></td>
<td>2013</td>
</tr>
<tr>
<td><strong>QUT code</strong></td>
<td>MA54 + SC60</td>
</tr>
<tr>
<td><strong>Duration (full-time)</strong></td>
<td>3 years</td>
</tr>
<tr>
<td><strong>OP</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>Rank</strong></td>
<td>99</td>
</tr>
<tr>
<td><strong>Campus</strong></td>
<td>Gardens Point</td>
</tr>
<tr>
<td><strong>Domestic fee (indicative)</strong></td>
<td>2013: CSP $4200 per Semester (48 credit points)</td>
</tr>
<tr>
<td><strong>Total credit points</strong></td>
<td>384 (BMaths 288 cp and BAppSc(Hons) 96cp)</td>
</tr>
<tr>
<td><strong>Credit points full-time sem.</strong></td>
<td>48</td>
</tr>
<tr>
<td><strong>Start months</strong></td>
<td>February</td>
</tr>
<tr>
<td><strong>Int. Start Months</strong></td>
<td>February</td>
</tr>
<tr>
<td><strong>Course Coordinator</strong></td>
<td>Mr Richard Thomas</td>
</tr>
<tr>
<td><strong>Discipline Coordinator</strong></td>
<td>A/Prof Dann Mallet 07 3138 2354 <a href="mailto:dg.mallet@qut.edu.au">dg.mallet@qut.edu.au</a></td>
</tr>
</tbody>
</table>

**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.

**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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

**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**

<table>
<thead>
<tr>
<th>Semesters</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Year 1, Semester 1 (48 cp)</td>
<td></td>
</tr>
</tbody>
</table>
## 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:

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Normal BMaths and BAppSc(Hons) units: BMaths Coursework (48 cp)</td>
</tr>
<tr>
<td></td>
<td>Dean's Scholars Program enrichment unit:</td>
</tr>
<tr>
<td>SCB303</td>
<td>Tutorial Program for Dean's Scholars</td>
</tr>
<tr>
<td></td>
<td>Normal BMaths and BAppSc(Hons) units: BMaths Coursework (36 cp)</td>
</tr>
<tr>
<td></td>
<td>Dean's Scholars Program enrichment unit:</td>
</tr>
<tr>
<td>SCB401</td>
<td>Research Methods for Dean's Scholars</td>
</tr>
<tr>
<td></td>
<td>Or other approved unit</td>
</tr>
<tr>
<td></td>
<td>Normal BMaths and BAppSc(Hons) units: BMaths Coursework (36 cp)</td>
</tr>
<tr>
<td></td>
<td>Dean's Scholars Program enrichment unit:</td>
</tr>
<tr>
<td>SCB501-1</td>
<td>Research Project for Dean's Scholars</td>
</tr>
<tr>
<td></td>
<td>Normal BMaths and BAppSc(Hons) units: BAppSc Coursework (36 cp)</td>
</tr>
<tr>
<td></td>
<td>Dean's Scholars Program enrichment unit:</td>
</tr>
<tr>
<td>SCB501-2</td>
<td>Research Project for Dean's Scholars</td>
</tr>
<tr>
<td></td>
<td>Normal BMaths and BAppSc(Hons) units: BMaths Coursework (36 cp)</td>
</tr>
<tr>
<td></td>
<td>Normal BMaths and BAppSc(Hons) units: BAppSc(Hons) Coursework/Research (48 cp)</td>
</tr>
<tr>
<td></td>
<td>Normal BMaths and BAppSc(Hons) units: BAppSc(Hons) Coursework/Research (48 cp)</td>
</tr>
</tbody>
</table>

### 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.
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.

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)

<table>
<thead>
<tr>
<th>Component</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.5</td>
</tr>
</tbody>
</table>

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, Microbiology, Physics.

**Domestic Course structure**

**Course Structure**

As a student in the Bachelor of Applied Science (SC01) degree. The core units normally studied in first year are replaced by some changes are made to the first year that can be completed in an accelerated format. Industry, Life Science Technologies.

- **Astrophysics, Biodiversity, Chemistry for 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 individually-tailored tutorial 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
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:


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.

This information is correct as at 19/12/2013. For the most up-to-date course information, visit http://www.student.qut.edu.au/studying/courses/course?courseCode=SC01 + SC60&courseID=23071. CRICOS No.00213J
## Bachelor of Applied Science (Honours)

### 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
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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th>Speaking</th>
<th>Writing</th>
<th>Reading</th>
<th>Listening</th>
<th>Overall</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.0</td>
<td>6.5</td>
</tr>
</tbody>
</table>

### 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 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.

#### 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.

### 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
Email: p.mather@qut.edu.au

Geology
Mr David Hurwood
Phone: +61 7 3138 5072
Email: d.hurwood@qut.edu.au

Life Science
Associate Professor Terry Walsh
Phone: +61 7 3138 2347
Email: t.walsh@qut.edu.au

Mathematics
Dr Scott McCue
Phone: +61 7 3138 4295
Email: scott.mccue@qut.edu.au

Physics
Dr Esa Jaatinen
Phone: +61 7 3138 4281
Email: e.jaatinen@qut.edu.au

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 and how to communicate such findings in a rigorous, systematic manner.
Graduate Certificate In Built Environment and Engineering

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.

<table>
<thead>
<tr>
<th>IELTS (International English Language Testing System)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>speaking</td>
<td>6.0</td>
</tr>
<tr>
<td>writing</td>
<td>6.0</td>
</tr>
<tr>
<td>reading</td>
<td>6.0</td>
</tr>
<tr>
<td>listening</td>
<td>6.0</td>
</tr>
<tr>
<td>overall</td>
<td>6.0</td>
</tr>
</tbody>
</table>

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
# Graduate Certificate in Engineering (Power Generation)

**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](http://www.student.qut.edu.au/studying/courses/course?courseCode=BX21&courseID=22350. CRICOS No.00213) to find out how to apply and for further information.
Sample Structure

Semesters

- **Power Generation Unit Options**
- **Advanced Power Generation Unit Options**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Course Notes</td>
</tr>
<tr>
<td></td>
<td>Select one of:</td>
</tr>
<tr>
<td></td>
<td>Introduction To Power Plant</td>
</tr>
<tr>
<td></td>
<td>Project Delivery</td>
</tr>
<tr>
<td></td>
<td>PLUS select one unit from the Advanced Power Generation Unit Options, or Power Generation Unit Options.</td>
</tr>
<tr>
<td></td>
<td>You will be granted 24cp of advanced standing based on completion of approved units from UQ and CQU.</td>
</tr>
</tbody>
</table>

**Power Generation Unit Options**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPG001</td>
<td>Introduction To Power Plant</td>
</tr>
<tr>
<td>EPG005</td>
<td>Project Delivery</td>
</tr>
</tbody>
</table>

**Advanced Power Generation Unit Options**

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPG006</td>
<td>Applied Thermodynamics</td>
</tr>
<tr>
<td></td>
<td>Industrial Electrical Power Distribution</td>
</tr>
<tr>
<td>EPG015</td>
<td>Industrial Electrical Power Systems</td>
</tr>
</tbody>
</table>
Graduate Certificate in Information Technology

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.

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