Faculty of Science and Technology

Entry Programs (International)

QC01 Accelerated Foundation

QC02 Standard Foundation

QC04 Extended Foundation

QC10 English for Academic Purposes for degree programs

QC10 English for Academic Purposes for Foundation and University Diploma Programs

QC20 General English

QC21 General English Extension

QC22 English for Tertiary Preparation

QC24 English For Academic Purposes Plus

Certificate

QC05 University Certificate In Tertiary Preparation

Diploma

IT10 University Diploma in Information Technology

Bachelor Degree

IT04 Bachelor of Games and Interactive Entertainment

IT04 Bachelor of Games and Interactive Entertainment - Dean's Scholars Program

IT06 Bachelor of Corporate Systems Management

IT06 Bachelor of Corporate Systems Management - Dean's Scholars Program

IT22 Bachelor of Information Technology

IT22 Bachelor of Information Technology - Dean's Scholars Program

IT23 Bachelor of Information Technology

IX25 Bachelor of Engineering (Software Engineering)

LS37 Bachelor of Applied Science (Medical Science)

LS50 Bachelor of Biotechnology Innovation

MA54 Bachelor of Mathematics

PH38 Bachelor of Applied Science - Medical Radiation Technology (Medical Imaging Technology)

PH38 Bachelor of Applied Science - Medical Radiation Technology (Radiotherapy Technology)

SC01 Bachelor of Applied Science

SC01 + SC60 Bachelor of Applied Science & Bachelor of Applied Science (Honours) - Dean's Scholars Accelerated Honours Program

SC40 Bachelor of Biomedical Science

SC45 Bachelor of Pharmacy

Bachelor Degree (Double)

IF21 Bachelor of Engineering (Electrical)/ Bachelor of Mathematics

IF29 Bachelor of Applied Science/Bachelor of Information Technology

IF38 Bachelor of Information Technology/Bachelor of Laws

IF39 Bachelor of Applied Science/Bachelor of Laws

IF58 Bachelor of Mathematics/Bachelor of Information Technology

IF59 Bachelor of Engineering (Electrical)/Bachelor of Information Technology

IF60 Bachelor of Mathematics/Bachelor of Business (Accountancy, Banking and Finance or Economics)

IF61 Bachelor of Applied Science/Bachelor of Business

IF84 Bachelor of Applied Science/Bachelor of Education (Primary)

IF86 Bachelor of Arts/Bachelor of Applied Science

IT07 Bachelor of Corporate Systems Management/Bachelor of Information Technology

IT08 Bachelor of Corporate Systems Management/Bachelor of Information Technology

IT09 Bachelor of Corporate Systems Management/Bachelor of Games and Interactive Entertainment

IX02 Bachelor of Applied Science/Bachelor of Education (Secondary)

IX14 Bachelor of Applied Science/Bachelor of Education (Primary)

IX26 Bachelor of Applied Science/Bachelor of Information Technology

IX27 Bachelor of Creative Industries / Bachelor of Information Technology

IX29 Bachelor of Information Technology/Bachelor of Mathematics

IX31 Bachelor of Applied Science / Bachelor of Business

IX33 Bachelor of Business/Bachelor of Information Technology

IX37 Bachelor of Business / Bachelor of Mathematics

IX49 Bachelor of Arts/Bachelor of Information Technology

IX53 Bachelor of Information Technology/Bachelor of Laws

IX54 Bachelor of Engineering (Electrical)/Bachelor of Information Technology

IX55 Bachelor of Applied Science(Study Area A)/Bachelor of Information Technology

IX56 Bachelor of Creative Industries/Bachelor of Information Technology

IX57 Bachelor of Information Technology/Bachelor of Mathematics

IX58 Bachelor of Business (Study Area A)/ Bachelor of Information Technology

IX61 Bachelor of Corporate Systems Management/Bachelor of Justice

IX62 Bachelor of Business/Bachelor of Corporate Systems Management

IX63 Bachelor of Business/Bachelor of Games and Interactive Entertainment

IX64 Bachelor of Games and Interactive Entertainment/Bachelor of Mathematics

IX65 Bachelor of Applied Science/Bachelor of Games and Interactive Entertainment

IX69 Bachelor of Fine Arts (Interactive and Visual Design) / Bachelor of Information Technology

IX72 Bachelor of Applied Science / Bachelor of Laws

SC20 Bachelor of Applied Science/Bachelor of Mathematics

Honours

IT04 Bachelor of Games and Interactive Entertainment - Dean's Scholars Program

IT06 Bachelor of Corporate Systems Management - Dean's Scholars Program

IT22 Bachelor of Information Technology - Dean's Scholars Program

IT28 Bachelor of Information Technology (Honours)

IT29 Bachelor of Information Technology (Honours) - Accelerated Program

LS50 Bachelor of Biotechnology Innovation

SC01 + SC60 Bachelor of Applied Science & Bachelor of Applied Science (Honours) - Dean's Scholars Accelerated Honours Program

SC60 Bachelor of Applied Science (Honours)

Graduate Certificate

IT73 Graduate Certificate in Information Management (Library Studies)(refer to IT43)

IT74 Graduate Certificate in Information Management (Information and Knowledge Management)

IT75 Graduate Certificate in Information Management (Records Management)

IT76 Graduate Certificate in Information Management (Web Management)

IT85 Graduate Certificate in Information Technology

IT89 Graduate Certificate in Information Technology (Wireless Games Technology)

IT90 Graduate Certificate in Information Technology (Computer Networks)
IT92 Graduate Certificate in Information Technology (Information Security)
IT93 Graduate Certificate in Information Technology (Enterprise Wide Software)
IT94 Graduate Certificate in Information Technology (Electronic Commerce)
IT95 Graduate Certificate in Information Technology (Project)
IT97 Graduate Certificate in Information Technology (Generic)
IT98 Graduate Certificate in Information Technology (Multimedia)
IT99 Graduate Certificate in Information Technology (Component Software and Web Services)
IX97 Graduate Certificate in Research Commercialisation
LS66 Graduate Certificate in Biotechnology
MA65 Graduate Certificate in Mathematical Science
PH60 Graduate Certificate in Applied Science (Breast Ultrasound)
PH62 Graduate Certificate in Lighting (on-shore)
PH63 Graduate Certificate in Lighting (off-shore)

Graduate Diploma

IT35 Graduate Diploma in Information Technology (IT Graduates)
IT37 Graduate Diploma In Information Technology
IT38 Graduate Diploma in Information Technology (Non-IT Graduates)
LS76 Graduate Diploma in Biotechnology
MA75 Graduate Diploma in Mathematical Science
PH71 Graduate Diploma in Applied Science (Medical Physics)
PH71 Graduate Diploma in Applied Science (Medical Ultrasound)
PH72 Graduate Diploma in Lighting (on-shore)
PH73 Graduate Diploma in Lighting (off-shore)
PH75 Graduate Diploma in Cardiac Ultrasound
SC71 Graduate Diploma in Applied Science

Masters Degree (Coursework)

IF98 Master of Business Administration/Master of Information Technology 1
IT40 Master of Information Technology (IT Graduates)
IT43 Master of Information Technology
IT44 Master of Information Technology (Advanced)
IT45 Master of Information Technology (Non-IT Graduates)
IT48 Master of Information Technology (Advanced)
IT53 Master of Business Process Management
IT70 Master of Information Management(refer to IT43)
IT74 Graduate Certificate in Information Management (Information and Knowledge Management)
IT75 Graduate Certificate in Information Management (Records Management)
IT76 Graduate Certificate in Information Management (Web Management)
IX99 Master of Research and Development Management
LS86 Master of Biotechnology
LS96 Master of Biotechnology (Advanced)
MA85 Master of Mathematical Science
PH80 Master of Applied Science (Medical Physics)
PH80 Master of Applied Science (Medical Ultrasound)
PH82 Master of Lighting (on-shore)

PH83 Master of Lighting (off-shore)

PH85 Master of Cardiac Ultrasound

Masters Degree (Research)

IT60 Master of Information Technology (Research)

SC80 Master of Applied Science (Research)

Doctoral

IF49 Doctor of Philosophy (Information Technology)

IF49 Doctor of Philosophy (Mathematics)

IF49 Doctor of Philosophy (Science)

IT80 Doctor of Information Technology

University wide unit sets

Unit sets: Accounting, Economics and Finance

Unit sets: Advertising, Integrated Marketing Communication, Logistics, Marketing and Public Relations

Unit sets: Built Environment and Design

Unit sets: Creative Industries

Unit sets: Engineering

Unit sets: Entrepreneurship, Human Resource Management and Management

Unit sets: Natural Resource Sciences

Unit sets: Faculty of Health

Unit sets: Information Technology

Unit sets: International Business, Languages, and Tourism and Entertainment Marketing

Unit sets: International Exchange

Unit sets: International Studies

Unit sets: Justice and the Law

Unit sets: Mathematical Sciences

Unit sets: Multimedia and Technologies

Unit sets: Physical and Chemical Sciences

Unit sets: Science

Unit sets: Society and Culture

Unit sets: Urban Development and Construction

Bachelor of Engineering (Electrical)/ Bachelor of Mathematics (IF21)

Year offered: 2009
Admissions: Yes
CRICOS code: 020329J
Course duration (full-time): 5 years
Domestic fees (indicative): 2009: CSP $3,547 (indicative) per semester
International Fees (per semester): 2009: $11,000 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419572
Past rank cut-off: 80
Past OP cut-off: 11
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging; ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 480
Standard credit points per full-time semester: 48
Course coordinator: Dr R.Mahalinga-Iyer (Engineering); Professor Helen MacGillivray (Mathematics)
Discipline coordinator: Dr Jason Ford (Engineering)
Campus: Gardens Point

Recommended study

Chemistry, Maths C and Physics are recommended.

Career Opportunities

Electrical and computer engineers design, install and maintain electrical, electronic, telecommunications and computing systems on behalf of government and private companies. A stronger training in mathematics and statistics enhances capabilities in modelling, analysis and design.

Overview

The program integrates both the engineering and mathematics degree. Mathematics and engineering have always had close connections, but recent advancement in mathematics and statistics are increasingly being used to help solve complex engineering problems.

Special Course Requirements

A candidate for this course must obtain at least 60 days of industrial experience in an engineering environment approved by the course coordinator.

Professional Recognition

This degree meets the requirements for membership of Engineers Australia, and the coursework requirements for accredited graduate membership of the Australian Mathematical Society. Students may also become a member of the Statistical Society of Australia.

Contact Details

Electrical Coordinator
Dr Firuz Zare
Email: bee.enquiries@qut.com

Mathematics Coordinator
Professor Helen MacGillivray
Phone: +61 7 3138 2337
Email: h.macgillivray@qut.edu.au

Bursaries and Scholarships

Students enrolled in this course can apply for industry-sponsored bursaries. These bursaries are awarded on a competitive basis. Go to QUT Scholarships website. Look under Commencing Students - Faculty 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

Phone +61 7 3138 1993, Fax +61 7 3138 1516, email: bee.enquiries@qut.com

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Course structure - For students with four semesters of Senior Mathematics B and Senior Mathematics C

For students with four semesters of both Senior Mathematics B and Senior Mathematics C (or equivalent) with an exit assessment of at least Sound Achievement in both subjects.

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Year 1, Semester 1	
BEB100	Introducing Professional Learning
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
PCB136	Engineering Physics 1C

Year 1, Semester 2	
ENB101	Engineering Mechanics 1
ENB103	Electrical Engineering
MAB101	Statistical Data Analysis 1
MAB220	Computational Mathematics 1

Year 2, Semester 1

ENB240	Introduction To Electronics
ENB246	Engineering Problem Solving
MAB210	Statistical Modelling 1
MAB311	Advanced Calculus

Year 2, Semester 2

BEB200	Introducing Sustainability
ENB243	Linear Circuits and Systems
ENB244	Microprocessors and Digital Systems
MAB413	Differential Equations

Year 3, Semester 1

ENB242	Introduction To Telecommunications
ENB350	Real-time Computer-based Systems
MAB312	Linear Algebra
MAB314	Statistical Modelling 2

Year 3, Semester 2

ENB245	Introduction To Design and Professional Practice
ENB352	Communication Environments For Embedded Systems
MAB414	Applied Statistics 2
	Mathematics elective (Level 2)

Year 4, Semester 1

ENB301	Instrumentation and Control
ENB340	Power Systems and Machines
ENB342	Signals, Systems and Transforms
	Mathematics elective (Level 2)

Year 4, Semester 2

ENB345	Advanced Design and Professional Practice
ENB346	Digital Communications
ENB458	Modern Control Systems
	Mathematics elective (Level 3)

Year 5, Semester 1

BEB701	Work Integrated Learning 1
BEB801	Project 1
	Electrical Engineering elective
	Mathematics elective (Level 3)

Year 5, Semester 2

BEB802	Project 2
ENB344	Industrial Electronics
	Mathematics elective (Level 3)
	Mathematics elective (Level 3)

Course structure - For students with fours semesters of Senior Mathematics B (or equivalent) only

For students with four semesters of Senior Mathematics B (or equivalent) only, with an exit assessment of at least Sound Achievement.

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Year 1, Semester 1

BEB100	Introducing Professional Learning
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
PCB136	Engineering Physics 1C

Year 1, Semester 2

ENB101	Engineering Mechanics 1
ENB103	Electrical Engineering
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C

Year 2, Semester 1

ENB240	Introduction To Electronics
ENB246	Engineering Problem Solving
MAB220	Computational Mathematics 1
MAB311	Advanced Calculus

Year 2, Semester 2

ENB243	Linear Circuits and Systems
ENB244	Microprocessors and Digital Systems
MAB210	Statistical Modelling 1
MAB413	Differential Equations

Year 3, Semester 1

ENB242	Introduction To Telecommunications
ENB350	Real-time Computer-based Systems
MAB312	Linear Algebra
MAB314	Statistical Modelling 2

Year 3, Semester 2

BEB200	Introducing Sustainability
ENB245	Introduction To Design and Professional Practice
ENB352	Communication Environments For Embedded Systems
MAB414	Applied Statistics 2

Year 4, Semester 1

ENB301	Instrumentation and Control
ENB340	Power Systems and Machines
ENB342	Signals, Systems and Transforms
	Mathematics elective (Level 2)

Year 4, Semester 2

| ENB345 | Advanced Design and Professional Practice |
| ENB346 | Digital Communications |

| ENB458 | Modern Control Systems |
| | Mathematics elective (Level 3) |

BEB701	Work Integrated Learning 1
BEB801	Project 1
	Electrical Engineering elective
	Mathematics elective (Level 3)

BEB802	Project 2
ENB344	Industrial Electronics
	Mathematics elective (Level 3)
	Mathematics elective (Level 3)

Electrical Engineering Electives

ENB231	Materials and Manufacturing 1
ENB334	Design For Manufacturing
ENB350	Real-time Computer-based Systems
ENB352	Communication Environments For Embedded Systems
ENB436	Mechatronics System Design
ENB440	RF and Applied Electromagnetics
ENB441	Applied Image Processing
ENB445	RF Communication Technologies
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
INB353	Wireless and Mobile Networks
INB860	Computational Intelligence for Control and Embedded Systems

Mathematics Electives (Level 2)

MAB313	Mathematics of Finance
MAB420	Computational Mathematics 2
MAB422	Mathematical Modelling
MAB461	Discrete Mathematics
MAB480	Introduction to Scientific Computation

Mathematics Electives (Level 3)

| MAB521 | Applied Mathematics 3 |

MAB522	Computational Mathematics 3
MAB524	Statistical Inference
MAB533	Statistical Techniques
MAB536	Time Series Analysis
MAB613	Partial Differential Equations
MAB623	Financial Mathematics
MAB624	Applied Statistics 3
MAB672	Advanced Mathematical Modelling

NOTES:

- Some deviations from the above course structure may be possible with the permission of the course coordinator. This is more likely to apply in the later years than the earlier years of the course.

Potential Careers:

Electrical and Computer Engineer, Electrical Engineer, Mathematician, Statistician.

Bachelor of Applied Science/Bachelor of Information Technology (IF29)

Year offered: 2009
Admissions: No
CRICOS code: 020327M
Course duration (full-time): 4 Years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
Domestic Entry: February
International Entry: February
QTAC code: 419302; Dfee: 419306
Past rank cut-off: 72. Dfee places were not offered last year.
Past OP cut-off: 13. Dfee places were not offered last year.
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 408 (Note: The minimum course load per semester required for full-time enrolment may be more than 36 credit points)
Standard credit points per full-time semester: 48
Course coordinator: Dr Perry Hartfield (Science); Ruth Christie(InfTech)
Discipline coordinator: Dr Perry Hartfield (Biochemistry); Dr Marion Bateson (Biotechnology); Dr Robert Johnson (Chemistry); Dr Ian Williamson (Ecology); Dr Robin Thwaites (Environmental Science); Dr Emad Kiriakous (Forensic Science); Dr Gary Huftile (Geoscience); Dr Christine Knox (Microbiology); Dr Greg Michael (Physics)
Campus: Gardens Point

Career Opportunities

The course prepares you for an increasing range of careers that involve the application of information technology to science. As a graduate of the double degree, you are also qualified for employment in the areas of software engineering and data communications.

The Bachelor of Applied Science allows multi-disciplinary programs of study to help position you within the broad range of science disciplines and qualify you as a competent professional within your chosen field.

Recommended study

At least one of the sciences. For the majors in biochemistry, biotechnology, forensic science and microbiology - Biological Science and Chemistry are recommended; for the major in physics - Maths C is recommended.

Course Design

The science component of the course offers you a choice of one of the major areas of study available in the Bachelor of Applied Science (SC01) course. To allow you to complete the double degree in a shorter period of time, your co-major will be taken from the information technology program therefore it is not possible to choose any of the co-majors listed under the Bachelor of Applied Science course.

The information technology component gives you the opportunity to undertake a combined major in Data Communications and Software Engineering. Theoretical aspects are balanced by strong practical components in both of the Science and Information Technology degrees.

Professional Recognition

Graduates will satisfy the requirements for membership in the relevant professional body for their chosen science major. See the Bachelor of Applied Science (SC01) course for details. Graduates are also eligible for membership of the Australian Computer Society (ACS).

Cooperative Education Program

An optional one-year period of paid work experience in an area of information technology is available to eligible full-time students. The Cooperative Education Program is a joint venture between employers and educators to better prepare students for employment upon graduation. Companies that QUT's Cooperative Education students have worked with include Energex, Boeing, CITEC, Global Banking and Securities Transaction, various Queensland Government departments, Dialog, TABQ, RACQ and Sun Microsystems.

For more information visit http://coop.fit.qut.edu.au/

Contact Details

Science Coordinator
Dr Perry Hartfield
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Information Technology Coordinator
Dr Alan Tickle
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Discipline Coordinators

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Biotechnology
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Forensic Science
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Email: g.huftile@qut.edu.au

Microbiology
Dr Christine Knox
Phone: +61 7 3138 2304
Email: c.knox@qut.edu.au

Physics
Dr Greg Michael
Phone: +61 7 3138 1584
Email: g.michael@qut.edu.au

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Find out more on deferment.

Course structure - Major in Biochemistry

Year 4, Semester 1	
INB301	The Business of IT
INB350	Internet Protocols and Services
LSB508	Advanced Metabolism
LSB527	Biomedical Research Technologies

Year 4, Semester 2	
INB302	Capstone Project
	IT Elective Unit
LSB607	Protein Purification
LSB608	Protein Science

Course Structure - Major in Biotechnology

Year 4, Semester 1	
INB301	The Business of IT
	IT Elective Unit
LSB503	Medical Cell Biology
	Either
LSB509	Medical Biotechnology 1
	Or

LSB577	Plant Biotechnology 1

Year 4, Semester 2	
INB302	Capstone Project
	IT Elective Unit
	Select TWO units from:
LSB605	Protein Engineering and Bioprocessing
LSB609	Medical Biotechnology 2
LSB677	Plant Biotechnology 2

Course structure - Major in Chemistry

Year 4, Semester 1	
INB301	The Business of IT
	IT Elective Unit
PCB505	Advanced Physical Chemistry
PCB554	Synthesis and Reactivity in Organic Chemistry

Year 4, Semester 2	
INB302	Capstone Project
	IT Elective Unit
PCB634	Organometallic and Coordination Chemistry
PCB644	Frontiers in Chemistry

Course Structure - Major in Ecology

Year 4, Semester 1	
INB301	The Business of IT
	IT Elective Unit
NRB510	Population Genetics
NRB511	Population Management

Year 4, Semester 2	
INB302	Capstone Project
	IT Elective Unit
NRB610	Ecological Applications
NRB611	Conservation Biology

Course structure - Major in Environmental Science

Year 4, Semester 1	
INB301	The Business of IT
	IT Elective Unit
NRB500	Environmental Systems and Modelling
NRB601	Field Mapping and Monitoring of Natural Resources

Year 4, Semester 2	
INB302	Capstone Project
	IT Elective Unit
NRB501	Spatial Analysis of Environmental Systems
NRB600	Sustainable Environmental Management

Course structure - Major in Forensic Science

Course structure - Major in Geoscience

Course structure - Major in Microbiology

Course structure - Major in Physics

IT Elective Unit List

INB305	Special Topic 4
INB365	Systems Programming
INB372	Software Engineering Principles
INB370	Software Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB350	Internet Protocols and Services
INB255	Security
INB352	Network Planning and Deployment
INB351	Computer Network Administration
INB353	Wireless and Mobile Networks
INB382	Real Time Rendering Techniques
INB381	Modelling and Animation Techniques
INB355	Cryptology and Protocols
INB180	Computer Games Studies
INB181	Introduction to Games Production
INB204	Special Topic 1
INB304	Special Topic 3
INB205	Special Topic 2
INB860	Computational Intelligence for Control and Embedded Systems
MAB281	Mathematics for Computer Graphics

Potential Careers:

Analytical Chemist, Astrophysicist, Biochemist, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Data Communications Specialist, Economist, Environmental Scientist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, Industrial Chemist, Laboratory Technician (Chemistry), Marine Scientist, Medical Biotechnologist, Medical Physicist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Network Administrator, Network Manager, Physicist, Plant Biotechnologist, Population Ecologist, Software Engineer, Systems Analyst, Virologist.

Bachelor of Information Technology/Bachelor of Laws (IF38)

Year offered: 2009
Admissions: No
CRICOS code: 006385G
Course duration (full-time): 5 Years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
International Fees (per semester): 2009: $11,000 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419622
Past rank cut-off: 90
Past OP cut-off: 6
Assumed knowledge: English (4, SA), and for games technology and security majors, Maths B (4, SA), or for all other majors, Maths A, B or C (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 528
Course coordinator: IT: Mr Richard Thomas; Dr. Bill Dixon Director Undergraduate Law Programs
Campus: Gardens Point

OP Guarantee

The OP Guarantee does not apply to this program.

Overview

An objective of this double degree is to provide graduates with the ability to practise law in light of the complex environments generated by manufacturers, data processing consultancies and private and government organisations. Alternatively, graduates can choose to practise as computing professionals specialising in legal applications or information systems.

Cooperative Education Program

The School of ITâs 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 youâre 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.

Career Outcomes

Graduates of the Bachelor of Information Technology component may find employment as a: Programmer Systems Programmer Systems Manager Systems Designer Systems Analyst Computer Sales and Marketing Consultant Data Processing Manager

Professional Recognition

The Bachelor of Information Technology component meets the knowledge requirements for membership of the Australian Computer Society. The Bachelor of Laws component covers the areas of law required for the purposes of admission to practise as a Solicitor and/or Barrister in all Australian states and territories.

Further Information

Faculty of Science and Technology: phone +61 7 3138 2782, fax +61 7 3138 2703, email enquiry.scitech@qut.edu.au

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

IF38 - B InfoTech/B Laws

Course Structure 2009	
	The Law School is currently reviewing the law components of this course. This program may change in 2009 and is subject to final approval.

Year 1, Semester 1	
INB104	Building IT Systems
INB103	Industry Insights
INB210	Databases
INB250	Systems Architecture

Year 1, Semester 2	
INB270	Programming
INB251	Networks
	Choose one unit from: Intermediate Level Elective list. This choice will replace ITB008 from 2009 course summary.
	IT Elective Unit selected from List

Year 2, Semester 1	
LWB141	Legal Institutions and Method
LWB142	Law, Society and Justice

INB340	Database Design
	IT Elective
	IT Elective

INB271	The Web
INB311	Enterprise Systems
LWB143	Legal Research and Writing
LWB144	Laws and Global Perspectives

Year 3, Semester 1

INB301	The Business of IT
	IT Elective Unit selected from List
LWB136	Contracts A
LWB138	Fundamentals of Torts
LWB238	Fundamentals of Criminal Law

Year 3, Semester 2

LWB137	Contracts B
LWB139	Select Issues in Torts
LWB239	Criminal Responsibility

Year 4, Semester 1

LWB231	Introduction to Public Law
LWB236	Real Property A
LWB240	Principles of Equity
LWB333	Theories of Law

Year 4, Semester 2

LWB235	Australian Federal Constitutional Law
LWB237	Real Property B
LWB241	Trusts
LWB334	Corporate Law

Year 5, Semester 1

LWB332	Commercial and Personal Property Law
LWB431	Civil Procedure
LWB432	Evidence
LWB434	Advanced Research and Legal Reasoning
	Electives

Year 5, Semester 2

LWB331	Administrative Law
LWB433	Professional Responsibility
	Electives

IT Elective Unit List

Information Technology Elective Unit List

INB104	Building IT Systems
INB103	Industry Insights
INB270	Programming

INB210	Databases
INB250	Systems Architecture
INB251	Networks
INB271	The Web
INB301	The Business of IT
INB302	Capstone Project
INS011	Co-operative Education 1
INS351	CCNA 3&4 Lan Switching
INB280	Fundamentals of Game Design
INB281	Advanced Game Design
INB341	Software Development With Oracle
INB311	Enterprise Systems
INB340	Database Design
INB306	Project 1
INB312	Enterprise Systems Applications
INB342	Enterprise Data Mining
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB330	Information Management
INB320	Business Process Modelling
INB335	Information Resources
INB120	Corporate Systems
INB122	Organisational Databases
INB123	Project Management Practice
INB124	Information Systems Development
INB220	Business Analysis
INB221	Technology Management
INB325	Corporate Systems Management Project
INB371	Data Structures and Algorithms
INB272	Interaction Design
INB305	Special Topic 4
INB365	Systems Programming
INB372	Software Engineering Principles
INB370	Software Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB350	Internet Protocols and Services
INB255	Security
INB352	Network Planning and Deployment
INB351	Computer Network Administration
INB353	Wireless and Mobile Networks
INB382	Real Time Rendering Techniques
INB381	Modelling and Animation Techniques
INB355	Cryptology and Protocols
INB180	Computer Games Studies

INB181   Introduction to Games Production

INB204   Special Topic 1

INB304   Special Topic 3

INB205   Special Topic 2

INB860   Computational Intelligence for Control and Embedded Systems

MAB281   Mathematics for Computer Graphics

Potential Careers:

Barrister, Business Analyst, Crown Law Officer, Database Manager, Electronic Commerce Developer, In-House Lawyer, Programmer, Public Servant, Solicitor, Systems Analyst, Systems Manager, Systems Programmer, Web Designer.

Bachelor of Applied Science/Bachelor of Laws (IF39)

Year offered: 2009
Admissions: No
CRICOS code: 012661G
Course duration (full-time): 5 Years
Domestic fees (indicative): 2009: CSP $4,089 (indicative) per semester
International Fees (per semester): 2009: $11,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419712
Past rank cut-off: 90
Past OP cut-off: 6
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 528 (Note: The minimum course load per semester required for full-time enrolment may be more than 36 credit points)
Standard credit points per full-time semester: 60 (years 1 and 4), 48 (years 2, 3 and 5)
Course coordinator: Dr Perry Hartfield (Science); Dr. William Dixon Director, Undergraduate Programs (Law)
Discipline coordinator: Dr Perry Hartfield (Biochemistry); Dr Marion Bateson (Biotechnology); Dr Robert Johnson (Chemistry); Dr Ian Williamson (Ecology); Dr Robin Thwaites (Environmental Science); Dr Emad Kiriakous (Forensic Science); Dr Gary Huftile (Geoscience); Dr Scott McCue (Mathematics); Dr Christine Knox (Microbiology); Dr Greg Michael (Physics)
Campus: Gardens Point

Career Opportunities

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.

OP Guarantee

The OP Guarantee does not apply to this course.

Course Design

The course is designed to cover all major areas of the law as well as allowing students to choose any one of the science majors that are offered in the Bachelor of Applied Science (SC01) course.

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.

Professional Recognition

Graduates will satisfy the requirements of membership in the relevant professional body for their chosen science major. See the Bachelor of Applied Science (SC01) course for details. The Bachelor of Laws component covers the areas of law required for admission as a legal practitioner and/or barrister in all Australian states and territories.

Contact Details

Science Coordinator
Dr Perry Hartfield
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Law Coordinator
Ms Sheryl Jackson
Phone: +61 7 3138 2707

Discipline Coordinators

Biochemistry
Dr Perry Hartfield
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Biotechnology
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Chemistry
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Ecology
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Geoscience
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Email: g.huftile@qut.edu.au

Mathematics
Dr Scott McCue

Phone: +61 7 3138 4295
Email: scott.mccue@qut.edu.au

Microbiology
Dr Christine Knox
Phone: +61 7 3138 2301
Email: c.knox@qut.edu.au

Physics
Dr Greg Michael
Phone: +61 7 3138 1584
Email: g.michael@qut.edu.au

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Course structure

Note:
The Law School is currently reviewing the law components of this course to continue to meet the needs of students and employers. As a result this program may change in 2009 and is subject to final approval.

Year 2, Semester 1	
LWB136	Contracts A
	Science Major Unit
	Science Major Unit
	Science Major Unit

Year 2, Semester 2	
LWB137	Contracts B
	Science Major Unit
	Science Major Unit
	Science Major Unit

Year 3, Semester 1	
LWB147	Torts A
LWB238	Fundamentals of Criminal Law
	Science Major Unit
	Science Major Unit

Year 3, Semester 2	
LWB148	Torts B
LWB239	Criminal Responsibility
	Science Major Unit

	Science Major Unit

Year 4, Semester 1	
LWB240	Principles of Equity
LWB242	Constitutional Law
LWB243	Property Law A
LWB333	Theories of Law
	Law Elective

Year 4, Semester 2	
LWB241	Trusts
LWB244	Property Law B
LWB334	Corporate Law
	Law Elective
	Law Elective

Year 5, Semester 1	
LWB335	Administrative Law
LWB431	Civil Procedure
LWB432	Evidence
LWB434	Advanced Research and Legal Reasoning

Year 5, Semester 2	
LWB433	Professional Responsibility
	Law Elective
	Law Elective
	Law Elective

Course structure - Major in Biochemistry

Year 2, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
LQB386	Microbial Structure and Function

Year 2, Semester 2	
LQB481	Biochemical Pathways and Metabolism
LQB483	Molecular Biology Techniques
	Either
LQB484	Introduction to Genomics and Bioinformatics
	Or
LQB486	Clinical Microbiology 1

Year 3, Semester 1	
LQB581	Functional Biochemistry
LQB582	Biomedical Research Technologies

Year 3, Semester 2	
LQB681	Biochemical Research Skills
LQB682	Protein Biochemistry and Bioengineering

Course structure - Major in Biotechnology

Year 2, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
LQB386	Microbial Structure and Function

Year 2, Semester 2

LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics
	Either:
LQB481	Biochemical Pathways and Metabolism
	Or
LQB486	Clinical Microbiology 1

Year 3, Semester 1

	Select TWO units from:
LQB583	Genetic Research Technology
LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation

Year 3, Semester 2

	Select TWO units from:
LQB682	Protein Biochemistry and Bioengineering
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions

Course structure - Major in Chemistry

Year 2, Semester 1

PQB312	Analytical Chemistry For Scientists and Technologists
PQB313	Analytical Chemistry For Industry
PQB331	Structure and Bonding

Year 2, Semester 2

PQB401	Reaction Kinetics, Thermodynamics and Mechanisms
PQB442	Chemical Spectroscopy
	Either
PQB404	Nanotechnology and Nanoscience
	Or
PQB423	Process Principles

Year 3, Semester 1

PQB502	Materials Chemistry and Characterisation
PQB531	Chemical Reactions 2

Year 3, Semester 2

PQB631	Applied Molecular Science
PQB642	Chemical Research

Course structure - Major in Ecology

Year 2, Semester 1

NQB302	Earth Surface Systems
NQB321	Ecology
	Either
NQB322	Invertebrate Biology
	Or
NQB323	Plant Biology

Year 2, Semester 2

NQB421	Experimental Design
NQB422	Genetics and Evolution
NQB423	Vertebrate Biology

Year 3, Semester 1

NQB521	Population Genetics and Molecular Ecology
NQB523	Population Management

Year 3, Semester 2

NQB622	Conservation Biology
NQB623	Ecological Systems

Course structure - Major in Environmental Science

Year 2, Semester 1

NQB302	Earth Surface Systems
NQB321	Ecology
	Either
NQB322	Invertebrate Biology
	Or
NQB323	Plant Biology

Year 2, Semester 2

NQB403	Soils and the Environment
NQB421	Experimental Design
NQB423	Vertebrate Biology

Year 3, Semester 1

NQB501	Environmental Modelling
NQB502	Field Mapping and Monitoring of Natural Resources

Year 3, Semester 2

NQB601	Sustainable Environmental Management
NQB602	Environmental Chemistry

Course structure - Major in Forensic Science

Year 2, Semester 1

LQB383	Molecular and Cellular Regulation
PQB331	Structure and Bonding
SCB384	Forensic Sciences - From Crime Scene to Court

Year 2, Semester 2

JSB979	Forensic Scientific Evidence
PQB312	Analytical Chemistry For Scientists and Technologists
PQB401	Reaction Kinetics, Thermodynamics and Mechanisms

Year 3, Semester 1

| PQB513 | Instrumental Analysis |
| PQB584 | Forensic Physical Evidence |

Year 3, Semester 2

| LQB680 | Forensic DNA Profiling |
| PQB684 | Forensic Analysis |

Course structure - Major in Geoscience

Year 2, Semester 1

NQB311	Mineralogy
NQB314	Sedimentary Geology
NQB321	Ecology

Year 2, Semester 2

NQB411	Petrology of Igneous and Metamorphic Rocks
NQB412	Structural Geology and Field Methods
NQB413	Stratigraphy

Year 3, Semester 1

| NQB502 | Field Mapping and Monitoring of Natural Resources |
| NQB513 | Geophysics |

Year 3, Semester 2

| NQB602 | Environmental Chemistry |
| NQB614 | Groundwater Systems |

Course structure - Major in Mathematics [WITH Mathematics C from Senior]

Year 2, Semester 1

	One Science unit - selected from:
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Two Level 2 Mathematics units* - available units are:
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB314	Statistical Modelling 2
MAB315	Operations Research 2
*	Students must complete at least one of MAB311, MAB312, MAB413

Year 2, Semester 2

| | Three Level 2 Mathematics units* - available units are: |

MAB313	Mathematics of Finance
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB420	Computational Mathematics 2
MAB480	Introduction to Scientific Computation
*	Students must complete at least one of MAB311, MAB312, MAB413

Year 3, Semester 1

	Two Level 3 Mathematics units - available units are:
MAB521	Applied Mathematics 3
MAB522	Computational Mathematics 3
MAB523	Introduction to Quality Management
MAB525	Operations Research 3A
MAB526	Statistical Science 3
MAB672	Advanced Mathematical Modelling

Year 3, Semester 2

	Two Level 3 Mathematics units - available units are:
MAB524	Statistical Inference
MAB613	Partial Differential Equations
MAB621	Discrete Mathematics
MAB623	Financial Mathematics
MAB624	Applied Statistics 3
MAB625	Operations Research 3B

Course structure - Major in Mathematics [WITHOUT Mathematics C from Senior]

Year 2, Semester 1

MAB220	Computational Mathematics 1
	Two Level 2 Mathematics units* - available units are:
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB314	Statistical Modelling 2
MAB315	Operations Research 2
*	Students must complete at least one of MAB311, MAB312, MAB413

Year 2, Semester 2

	Three Level 2 Mathematics units* - available units are:
MAB313	Mathematics of Finance
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB420	Computational Mathematics 2
MAB480	Introduction to Scientific Computation
*	Students must complete at least one of MAB311, MAB312, MAB413

	Two Level 3 Mathematics units - available units are:
MAB521	Applied Mathematics 3
MAB522	Computational Mathematics 3
MAB523	Introduction to Quality Management
MAB525	Operations Research 3A
MAB526	Statistical Science 3
MAB672	Advanced Mathematical Modelling

Year 3, Semester 2

	Two Level 3 Mathematics units - available units are:
MAB524	Statistical Inference
MAB613	Partial Differential Equations
MAB621	Discrete Mathematics
MAB623	Financial Mathematics
MAB624	Applied Statistics 3
MAB625	Operations Research 3B

Course structure - Major in Microbiology

Year 2, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
LQB386	Microbial Structure and Function

Year 2, Semester 2

LQB483	Molecular Biology Techniques
LQB486	Clinical Microbiology 1
	Either
LQB481	Biochemical Pathways and Metabolism
	Or
LQB484	Introduction to Genomics and Bioinformatics

Year 3, Semester 1

LQB586	Clinical Microbiology 2
LQB587	Applied Microbiology 1: Water, Air and Soil

Year 3, Semester 2

LQB686	Microbial Technology and Immunology
LQB687	Applied Microbiology 2: Food and Quality Assurance

Course structure - Major in Physics

Year 2, Semester 1

MAB311	Advanced Calculus
PQB350	Thermodynamics of Solids and Gases
PQB360	Global Energy Balance and Climate Change

Year 2, Semester 2

PQB450	Energy, Fields and Radiation

PQB451	Electronics and Instrumentation
	Either
MMB451	Energy Management
	Or
PQB460	Astrophysics 1

Year 3, Semester 1

PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques

Year 3, Semester 2

PQB650	Advanced Theoretical Physics
PQB651	Experimental Physics

Footnotes for Law Units

#	Introduction to Legal Research is a two (2) hour lecture conducted in the first week only of Semester 1, 2009. It is designed to introduce students to the basics of legal research and provide an orientation to use of the Law Library. Students will be expected to undertake a library exercise in LWB141 Legal Institutions and Method using the skills and information outlined in this lecture.
*	Law Elective Units - In order to satisfy the requirements for the Bachelor of Laws component of the double degree, a student is required to complete a total of 48 credit points of elective units.

Potential Careers:

Actuary, Analytical Chemist, Astrophysicist, Barrister, Biochemist, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Crown Law Officer, Ecologist, Environmental Scientist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, In-House Lawyer, Industrial Chemist, Laboratory Technician (Chemistry), Marine Scientist, Mathematician, Medical Biotechnologist, Medical Physicist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Physicist, Plant Biotechnologist, Population Ecologist, Programmer, Quantitative Analyst, Social Scientist, Solicitor, Statistician, Virologist.

Doctor of Philosophy (Information Technology) (IF49)

Year offered: 2009
Admissions: Yes
CRICOS code: 006367J
Course duration (full-time): 3 years
Course duration (part-time): 6 years
Domestic fees (indicative): Aust citizens or PRs will be awarded an RTS/RTA place or a QUT sponsorship for tuition fees. If you exceed the max time, you will be charged - 2009: $6,720 per semester (indicative)
International Fees (per semester): 2009: $11,250 (indicative) per semester *(subject to annual review)*
International Entry: At any time
Campus: Gardens Point

Course Overview

The Doctor of Philosophy (PhD) is awarded in recognition of a candidateâs erudition in a broad field of learning and for notable accomplishment in that field through an original and substantial contribution to knowledge.

The candidateâs research must reveal high critical ability and powers of imagination and synthesis and may be in the form of new knowledge or significant and original adaptation, application and interpretation of existing knowledge.

Topics can include multidisciplinary problems suggested by external bodies, for example, industry, government and commerce, with joint supervisors from both academic and outside environments. The candidateâs doctoral work can be undertaken either on campus or at an off-campus location approved by QUT. The candidateâs PhD will be linked with one of the Facultyâs research areas.

Entry Requirements

Applicants must have a relevant first- or second-class division A honours degree or equivalent from QUT or another recognised institution.

Research Area

Areas of research interest and contact details can be obtained from the Faculty website.

Course Structure

The length of the program is generally three years full-time (including one year of provisional registration) or six years part-time (including 24 months of provisional registration).

Assessment for the doctoral award is based on a program of supervised research and investigation, culminating in a thesis.

Programs may include some coursework in support of the conduct of research and preparation of the thesis. Candidates are required to have regular, face-to-face interaction with supervisors and to participate in University scholarly activities such as research seminars, teaching and publication.

Further Information

Visit www.scitech.qut.edu.au, email infotech.research@qut.edu.au, or phone +61 7 3138 1000

Potential Careers:

Academic, Computer Games Developer, Computer Systems Engineer, Data Communications Specialist, Database Manager, Electronic Commerce Developer, Librarian, Network Administrator, Network Manager, Programmer, Software Engineer, Systems Analyst, Systems Manager, Systems Programmer.

Doctor of Philosophy (Mathematics) (IF49)

Year offered: 2009
Admissions: Yes
CRICOS code: 006367J
Course duration (full-time): 30 to 48 months with an honours degree; 24 to 48 months with a masters degree
Course duration (part-time): 42 to 96 months with an honours degree; 36 to 96 months with a masters degree
Domestic fees (indicative): Aust citizens or PRs will be awarded an RTS/RTA place or a QUT sponsorship for tuition fees. If you exceed the max time, you will be charged - 2009: $6,720 per semester (indicative)
International Fees (per semester): 2009: $11,250 (indicative) per semester *(subject to annual review)*
International Entry: At any time
Course coordinator: Associate Professor Peter Mather
Discipline coordinator: Professor Vo Anh
Campus: Gardens Point

Overview

The Doctor of Philosophy in science will suit graduates with an honours or masters degree who wish to seek highly-paid employment prospects in industry and research organisations and universities.

Entry Requirements

Candidates must have a relevant first-class or second-class division A (upper division) honours degree or an appropriate masters degree.

Course Description

When enrolling in the doctoral program, you can undertake an approved project in any field of interest supported by a Science research area within the Faculty of Science and Technology (outlined in the Faculty Prospectus).

Please note that these areas of research specialisation are given as a guide only. Staff are happy to discuss these and any related topics. Please contact the program leader of the relevant research area for further information.

You can undertake the course either full-time or part-time. If studying full-time with an appropriate honours degree, you can expect to complete your Doctor of Philosophy degree in three-and-a-half-years. Full details of the course structure are outlined in the following website: http://www.research.qut.edu.au/restdncen.

Contact Details

Course Coordinator
Associate Professor Peter Mather
Phone: +61 7 3138 1737
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Discipline Coordinator:

Mathematics
Professor Vo Anh
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Email: v.anh@qut.edu.au

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Full details of the course structure are outlined in the following website: http://www.research.qut.edu.au/restdncen.

Potential Careers:

Actuary, Data Communications Specialist, Mathematician, Statistician.

Doctor of Philosophy (Science) (IF49)

Year offered: 2009
Admissions: Yes
CRICOS code: 006367J
Course duration (full-time): 30 to 48 months with an honours degree; 24 to 48 months with a masters degree
Course duration (part-time): 42 to 96 months with an honours degree; 36 to 96 months with a masters degree
Domestic fees (indicative): Aust citizens or PRs will be awarded an RTS/RTA place or a QUT sponsorship for tuition fees. If you exceed the max time, you will be charged - 2009: $6,720 per semester (indicative)
International Fees (per semester): 2009: $11,500 (indicative) per semester *(subject to annual review)*
International Entry: At any time
Course coordinator: Associate Professor Peter Mather
Discipline coordinator: Associate Professor Peter Fredericks (Chemistry); Associate Professor Terry Walsh & Professor Judith Clements (Life Sciences); Associate Professor Peter Mather (Natural Resource Sciences); Dr Andrew Fielding (Physics)
Campus: Gardens Point

Overview

The Doctor of Philosophy in science will suit graduates with an honours or masters degree who wish to seek highly-paid employment prospects in industry and research organisations and universities.

Entry Requirements

Candidates must have a relevant first-class or second-class division A (upper division) honours degree or an appropriate masters degree.

Course Description

When enrolling in the doctoral program, you can undertake an approved project in any field of interest supported by a Science research area within the Faculty of Science and Technology (outlined in the Faculty Prospectus).

Please note that these areas of research specialisation are given as a guide only. Staff are happy to discuss these and any related topics. Please contact the program leader of the relevant research area for further information.

You can undertake the course either full-time or part-time. If studying full-time with an appropriate honours degree, you can expect to complete your Doctor of Philosophy degree in three-and-a-half years. Full details of the course structure are outlined in the following website: http://www.research.qut.edu.au/restdncen.

Contact Details

Course Coordinator

Associate Professor Peter Mather
Phone: +61 7 3138 1737
Email: p.mather@qut.edu.au

Discipline Coordinators:

Chemistry
Associate Professor Peter Fredericks
Phone: +61 7 3138 2297
Email: p.fredericks@qut.edu.au

Life Sciences
Dr Terry Walsh
Phone: +61 7 3138 2347
Email: t.walsh@qut.edu.au

Professor Judith Clements
Phone: +61 7 3138 6198
Email: j.clements@qut.edu.au

Natural Resource Sciences
Associate Professor Peter Mather
Phone: +61 7 3138 1737
Email: p.mather@qut.edu.au

Physics
Dr Andrew Fielding
Phone: +61 7 3138 5325
Email: a.fielding@qut.edu.au

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Full details of the course structure are outlined in the following website: http://www.research.qut.edu.au/restdncen.

Potential Careers:

Biologist, Biotechnologist, Chemist, Chemist Industrial, Clinical Laboratory Scientist, Coastal Scientist, Conservation Biologist, Ecologist, Environmental Scientist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Hydrogeologist, Industrial Chemist, Marine Scientist, Medical Biotechnologist, Medical Physicist, Medical Scientist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Physicist, Population Ecologist.

Bachelor of Mathematics/Bachelor of Information Technology (IF58)

Year offered: 2009
Admissions: No
CRICOS code: 020327M
Course duration (full-time): 4 Years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
Domestic Entry: February
International Entry: February
QTAC code: 419552; Dfee: 419556
Past rank cut-off: 75. Dfee places were not offered last year.
Past OP cut-off: 12. Dfee places were not offered last year.
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 420 (Note: The minimum course load per semester required for full-time enrolment may be more than 36 credit points)
Course coordinator: Dr Gary Carter (Mathematics) Richard Thomas (IT)
Discipline coordinator: Dr Gary Carter (Mathematics),
Campus: Gardens Point

Career Opportunities

As a graduate you may find employment as a programmer, software engineer, systems programmer, technical support specialist, systems manager, systems designer, computer scientist, security analyst, systems analyst, data communications specialist, mathematician, or statistician.

Course Structure

The double degree offers a foundation in mathematics and information technology in the first year. You will then select integrated strands combining units from the areas of applicable mathematics, computational mathematics, operations research, statistics, or financial mathematics with a combined major in Data Communications and Software Engineering.

Professional Recognition

On graduation, you 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.

Cooperative Education Program

An optional one-year period of paid work experience in an area of information technology is available to eligible full-time students. The Cooperative Education Program is a joint venture between employers and educators to better prepare students for employment upon graduation. Companies that QUT's Cooperative Education students have worked with include Energex, Boeing, CITEC, Global Banking and Securities Transaction, various Queensland Government departments, Dialog, TABQ, RACQ and Sun Microsystems.

For more information visit http://coop.fit.qut.edu.au/

Mathematics Scholarships

Students enrolled in this course can apply for industry-sponsored scholarships. Mathematics equity scholarships are also awarded on the basis of socioeconomic disadvantage.

Contact Details

Course Coordinator
Dr Gary Carter (*Mathematics*)
Phone: +61 7 3138 5090
Email: g.carter@qut.edu.au

IT Course Coordinator
Mr Richard Thomas (*Information Technology*)
Phone: +61 7 3138 2782
Email: enquiry.scitech@qut.edu.au

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Mathematics Units

Students must complete at least 48 credit points from Level 3 mathematics units

Level 2 Units	
MAB281	Mathematics for Computer Graphics
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2
MAB315	Operations Research 2
MAB413	Differential Equations
MAB414	Applied Statistics 2

MAB420	Computational Mathematics 2		INB340	Database Design
MAB422	Mathematical Modelling		INB306	Project 1
MAB461	Discrete Mathematics		INB312	Enterprise Systems Applications
MAB480	Introduction to Scientific Computation		INB342	Enterprise Data Mining
MAB481	Visualisation and Data Analysis		INB385	Multimedia Systems

INB386 Advanced Multimedia Systems

Level 3 Units

MAB521	Applied Mathematics 3
MAB522	Computational Mathematics 3
MAB524	Statistical Inference
MAB525	Operations Research 3A
MAB533	Statistical Techniques
MAB536	Time Series Analysis
MAB613	Partial Differential Equations
MAB623	Financial Mathematics
MAB624	Applied Statistics 3
MAB625	Operations Research 3B
MAB640	Industry Project
MAB672	Advanced Mathematical Modelling
MAB681	Advanced Visualisation and Data Analysis

NOTES:	For students commencing in 2004 onwards, the units MAB311 Advanced Calculus and MAB312 Linear Algebra are mandatory. The suggested locations can be swapped.
NOTE:	For students commencing in 2004 onwards, the units MAB523 Introduction to Quality Management and MAB621 Discrete Mathematics do not contribute to the mandatory 48 credit points minimum from Level 3 Mathematics units.
NOTE:	All Mathematics units have 4 contact hours per week.

IT Elective Unit List

Information Technology Elective Unit List

INB104	Building IT Systems
INB103	Industry Insights
INB270	Programming
INB210	Databases
INB250	Systems Architecture
INB251	Networks
INB271	The Web
INB301	The Business of IT
INB302	Capstone Project
INS011	Co-operative Education 1
INS351	CCNA 3&4 Lan Switching
INB280	Fundamentals of Game Design
INB281	Advanced Game Design
INB341	Software Development With Oracle
INB311	Enterprise Systems

INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB330	Information Management
INB320	Business Process Modelling
INB335	Information Resources
INB120	Corporate Systems
INB122	Organisational Databases
INB123	Project Management Practice
INB124	Information Systems Development
INB220	Business Analysis
INB221	Technology Management
INB325	Corporate Systems Management Project
INB371	Data Structures and Algorithms
INB272	Interaction Design
INB305	Special Topic 4
INB365	Systems Programming
INB372	Software Engineering Principles
INB370	Software Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB350	Internet Protocols and Services
INB255	Security
INB352	Network Planning and Deployment
INB351	Computer Network Administration
INB353	Wireless and Mobile Networks
INB382	Real Time Rendering Techniques
INB381	Modelling and Animation Techniques
INB355	Cryptology and Protocols
INB180	Computer Games Studies
INB181	Introduction to Games Production
INB204	Special Topic 1
INB304	Special Topic 3
INB205	Special Topic 2
INB860	Computational Intelligence for Control and Embedded Systems
MAB281	Mathematics for Computer Graphics

Potential Careers:

Actuary, Computer Game Programmer, Data Communications Specialist, Database Manager, Market Research Manager, Mathematician, Network Administrator, Network Manager, Programmer, Quantitative Analyst, Software Engineer, Statistician, Systems Analyst.

Bachelor of Engineering (Electrical)/Bachelor of Information Technology (IF59)

Year offered: 2009
Admissions: No
CRICOS code: 006384G
Course duration (full-time): 5 years
Domestic fees (indicative): 2009: CSP $3,585 (indicative) per semester
International Fees (per semester): 2009: $11,000 (indicative) per semester *(subject to annual review)*
QTAC code: 419512
Past rank cut-off: 76
Past OP cut-off: 12
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or **Total credit points:** 480
Standard credit points per full-time semester: 48
Course coordinator: Dr R.Mahalinga-Iyer (Engineering), Mr Richard Thomas (Information Technology)
Discipline coordinator: Dr Jasmine Banks (Engineering)
Campus: Gardens Point

Recommended Study

Chemistry, Math C and Physics are recommended.

Course Update

From semester one, 2009 this course will not be available for commencing students. IF59 will only be available for continuing students. New students - please refer to IX54. Please contact fit.enquiry@qut.edu.au for any enquiries.

Career Outcomes

Many graduates find employment in government instrumentalities such as communications, railways, electricity supply, hospitals, transport and in private organisations that are using electronics, electronic systems, computers and microprocessors to monitor, control, communicate and optimise processes and production.

Overview

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 double degree produces computer and electronic engineers especially suited for the development and application of electronic systems, including micro, mini and mainframe computer systems in all areas of industry.

Cooperative Education Program

An optional one-year period of paid work experience in an area of information technology is available to eligible full-time students. The Cooperative Education Program is a joint venture between employers and educators to better prepare students for employment upon graduation. Companies that QUT's Cooperative Education students have worked with include Energex, Boeing, CITEC, Global Banking and Securities Transaction, various Queensland Government departments, Dialog, TABQ, RACQ and Sun Microsystems.

For more information visit IT's Cooperative Education program home page at http://coop.fit.qut.edu.au/

Professional Recognition

This degree meets the requirements for membership of Engineers Australia and the Institution of Radio and Electronics Engineers Australia. Graduates of the Bachelor of Information Technology component meet the knowledge requirements for admission to the Australian Computer Society (ACS).

Special Course Requirements

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

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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

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).

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code

Further Information

Engineering Phone +61 7 3864 1993, Fax +61 7 3864 1516, email: bee.enquiries@qut.edu.au
Faculty of Science and Technology Phone +61 7 3138

IF59 - Course Structure for Continuing Students

Full-time Course Structure - Year 2, Semester 1

ENB240	Introduction To Electronics
INB251	Networks
INB271	The Web
MAB233	Engineering Mathematics 3

Year 2, Semester 2

ENB243	Linear Circuits and Systems
ENB245	Introduction To Design and Professional Practice
INB210	Databases
INB272	Interaction Design

Year 3, Semester 1

ENB242	Introduction To Telecommunications
ENB340	Power Systems and Machines
	IT Elective
	IT Elective

Year 3, Semester 2

ENB241	Software Systems Design
ENB244	Microprocessors and Digital Systems
ENB345	Advanced Design and Professional Practice
	IT Elective

Year 4, Semester 1

ENB342	Signals, Systems and Transforms
ENB343	Fields, Transmission and Propagation
ENB350	Real-time Computer-based Systems
	IT Elective

Year 4, Semester 2

ENB344	Industrial Electronics
ENB346	Digital Communications
INB301	The Business of IT
	IT Elective

Year 5, Semester 1

ENB301	Instrumentation and Control
BEB801	Project 1
	OR
INB309-1	Major Project
	IT Elective
	Applications Minor Selective

Year 5, Semester 2

BEB701	Work Integrated Learning 1

BEB802	Project 2
	OR
INB309-2	Major Project
	IT Elective
	Applications Minor Selective

Applications Minor Selectives - Same as for EN40 Electrical.

Please refer to EN40 Electrical Course Structure - Standard Program.

Industrial Experience

Students must obtain at least 60 days industrial experience in an engineering environment as approved by the Course Coordinator.

IT Elective Unit List

Information Technology Elective Unit List

INB104	Building IT Systems
INB103	Industry Insights
INB270	Programming
INB210	Databases
INB250	Systems Architecture
INB251	Networks
INB271	The Web
INB301	The Business of IT
INB302	Capstone Project
INS011	Co-operative Education 1
INS351	CCNA 3&4 Lan Switching
INB280	Fundamentals of Game Design
INB281	Advanced Game Design
INB341	Software Development With Oracle
INB311	Enterprise Systems
INB340	Database Design
INB306	Project 1
INB312	Enterprise Systems Applications
INB342	Enterprise Data Mining
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB330	Information Management
INB320	Business Process Modelling
INB335	Information Resources
INB120	Corporate Systems
INB122	Organisational Databases
INB123	Project Management Practice
INB124	Information Systems Development
INB220	Business Analysis
INB221	Technology Management

INB325	Corporate Systems Management Project
INB371	Data Structures and Algorithms
INB272	Interaction Design
INB305	Special Topic 4
INB365	Systems Programming
INB372	Software Engineering Principles
INB370	Software Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB350	Internet Protocols and Services
INB255	Security
INB352	Network Planning and Deployment
INB351	Computer Network Administration
INB353	Wireless and Mobile Networks
INB382	Real Time Rendering Techniques
INB381	Modelling and Animation Techniques
INB355	Cryptology and Protocols
INB180	Computer Games Studies
INB181	Introduction to Games Production
INB204	Special Topic 1
INB304	Special Topic 3
INB205	Special Topic 2
INB860	Computational Intelligence for Control and Embedded Systems
MAB281	Mathematics for Computer Graphics

IF59 - Elective Unit List

Electrical Engineering Elective Units	
EEB941	Modern Signal Processing
ENB440	RF and Applied Electromagnetics
ENB441	Applied Image Processing
ENB352	Communication Environments For Embedded Systems
ENB446	Wireless Communications
ENB448	Signal Processing and Filtering

Information Technology Elective Units	
	Please refer to Course Summary sheet.

Potential Careers:

Computer Systems Engineer, Electrical and Computer Engineer, Programmer, Software Engineer, Web Designer.

Bachelor of Mathematics/Bachelor of Business (Accountancy, Banking and Finance or Economics) (IF60)

Year offered: 2009
Admissions: No
CRICOS code: 027274G
Course duration (full-time): 4 Years
Domestic fees (indicative): 2009: CSP $4,002 (indicative) per semester
Domestic Entry: February
International Entry: February and July
QTAC code: 419212; Dfee: 419216
Past rank cut-off: 80. Dfee places were not offered last year.
Past OP cut-off: 10. Dfee places were not offered last year.
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 432
Standard credit points per full-time semester: 54 (Average)
Course coordinator: Prof Erhan Kozan (Mathematics); Dr Erica French (Business)
Discipline coordinator: Ms Ros Kent (Accountancy); Ms Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Robert Bianchi (Finance); Dr Robert Thompson (Human Resource Management); Mr Michael Cox (International Business); Dr Kavoos Mohannak (Management); Mr Bill Proud (Marketing); and Ms Amisha Mehta (Public Relations)
Campus: Gardens Point

Discontinuation

Students should note that from Semester 1, 2007 this course has been renamed and recoded to IX37 Bachelor of Business/Bachelor of Mathematics. 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 course structure information on the new course, please refer to the new course.

Career Opportunities

Test Graduates are equipped to undertake sophisticated economic and financial modelling which is important in business and government decision making. Quantitative analysts are employed by the financial sector in order to optimise returns both in the short and long-term. Graduates may also become actuarial trainees in the insurance and superannuation area although further study is required in order to qualify as an actuary.

Graduates of the Accountancy major can expect to find employment in auditing, financial analysis, corporate secretarial functions, costing, taxation, receivership, bankruptcy, trusteeship or management services.

Graduates of the Banking and Finance major find employment in the banking area of finance which can involve retail, wholesale or international projects, the funding of operations and investment of funds in loans or liquidity.

Graduates with Economics training are highly sought after. They are employed as economists and in a wide variety of related professional areas to provide strategic analysis and policy advice.

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 of Operations Research. Depending on the choice of major, extended major or specialisation graduates may be eligible for membership of the Economic Society of Australia (Queensland Division), Australian Institute of Management, Financial Services Institute of Australasia (FINSIA), Chartered Secretaries Australia, CPA Australia and the Institute of Chartered Accountants in Australia (ICAA).

Course Design

The course offers the opportunity to combine Mathematics with a business course majoring in Accountancy, Banking and Finance or Economics, which can be combined with an extended major in the same field, or with a double major from any of the Bachelor of Business majors, including Electronic Business.

Mathematics Scholarships

Students enrolled in this course can apply for industry sponsored scholarships. Mathematics equity scholarships are also awarded on the basis of socioeconomic disadvantage.

Course Combinations

Recommended combinations for the Business component are:
Accountancy: Extended major in Professional Accounting
Banking & Finance: Extended major in Banking, Financial Economics or Funds Management; or double major in Economics
Economics: Extended major in Financial Economics or double major in Banking & Finance.

*Please note that EFB101 Data Analysis for Business which is normally undertaken in the majors of Accountancy, Banking and Finance & Economics, is not required as the content will be covered in the statistics units from the mathematics component of the program.

Students also note that enrolment in the unit EFB326 Applied Portfolio Management is restricted to students undertaking the Financial Economics specialisation (FES) and the following extended majors: Banking (BFX); Financial Economics (FEX); and Funds Management (FDX).

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience. Further information is available at www.deferment.qut.edu.au

Contact Details

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Discipline Coordinators

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Banking and Finance
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Economics
Dr Radhika Lahiri
Phone: +61 7 3138 2753
Email: r.lahiri@qut.edu.au

Course structure

This course has been discontinued. Currently enrolled students should check the Course Summary Sheet (via QUT Virtual) for enrolment and unit information.

Potential Careers:

Account Executive, Accountant, Actuary, Banker, Banking and Finance Professional, Business Analyst, Certified Practicing Accountant, Computer Game Programmer, Corporate Secretary, Economist, Financial Advisor/Analyst, Financial Project Manager, Funds Manager, Government Officer, Investment Manager, Market Research Manager, Mathematician, Quantitative Analyst, Risk Manager, Statistician, Stockbroker.

Bachelor of Applied Science/Bachelor of Business (IF61)

Year offered: 2009
Admissions: No
CRICOS code: 042263G
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
Domestic Entry: February
International Entry: February
QTAC code: 419832; Dfee: 419836
Past rank cut-off: 80. Dfee places were not offered last year.
Past OP cut-off: 10. Dfee places were not offered last year.
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 432
Standard credit points per full-time semester: 54 (average)
Course coordinator: Dr Perry Hartfield (Science); Dr Erica French (Business)
Discipline coordinator: Ms Ros Kent (Accountancy); Ms Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Robert Bianchi (Finance); Dr Robert Thompson (Human Resource Management); Mr Michael Cox (International Business); Dr Kavoos Mohannak (Management); Mr Bill Proud (Marketing); and Ms Amisha Mehta (Public Relations)
Campus: Gardens Point

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This course has been discontinued. Currently enrolled students should check the Course Summary Sheet (via QUT Virtual) for enrolment and unit information.

Potential Careers:

Academic, Account Executive, Accountant, Advertising Professional, Analytical Chemist, Astrophysicist, Banker, Banking and Finance Professional, Biochemist, Biologist, Biomechanical Engineer, Biomedical Engineer, Biotechnologist, Business Analyst, Chemist, Chemist Industrial, Clinical Laboratory Scientist, Coastal Scientist, Conservation Biologist, Ecologist, Economist, Environmental Scientist, Estimator, Exchange Student, Financial Advisor/Analyst, Financial Project Manager, Forensic Scientist, Funds Manager, Geologist, Geophysicist, Geoscientist, Government Officer, Health Physicist, Home Economist, Human Resource Developer, Human Resource Manager, Hydrogeologist, Immunologist, Industrial Chemist, International Business Specialist, Investment Manager, Laboratory Technician (Chemistry), Manager, Marine Scientist, Marketing Officer/Manager, Medical Biotechnologist, Medical Physicist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Physicist, Plant Biotechnologist, Policy Officer, Population Ecologist, Programmer, Public Servant, Stockbroker, Virologist.

Bachelor of Applied Science/Bachelor of Education (Primary) (IF84)

Year offered: 2009
Admissions: No
Course duration (full-time): 4 Years
Domestic fees (indicative): 2009: CSP $3,694 (indicative) per semester
Domestic Entry: February
QTAC code: 409142
Past rank cut-off: 80
Past OP cut-off: 10
OP Guarantee: Yes
Assumed knowledge: English (4 SA) , Maths B (4 SA)
Total credit points: 384
Standard credit points per full-time semester: 48
Course coordinator: Dr Perry Hartfield (Science): Dr Mary Ryan (Education)
Campus: Gardens Point and Kelvin Grove

Career Outcomes

The Bachelor of Applied Science allows multidisciplinary programs of study that not only help students position themselves within the broad range of science disciplines but also qualify them as a competent professional in their chosen field.

Students are equipped to undertake research after graduation if they desire. The Bachelor of Education (Primary) prepares students to teach at all levels of the primary school. Students may also complete a discipline/content studies major in one of the key learning areas of the Queensland school curriculum.

Professional Recognition

The Bachelor of Education (Primary) is recognised by the Queensland Board of Teacher Registration as meeting the requirements for registration as a teacher in Queensland. Applicants for registration as a teacher in Queensland are subject to national criminal history checks.

For graduates with approved study: Australasian Association of Clinical Biochemists, Australasian Institute of Mining and Metallurgy, Australian Biotechnology Association, Australian Institute of Geoscientists, Australian Institute of Physics, Australian Mathematical Society, Australian Society of Biochemistry and Molecular Biology, Australian Society for Medical Research, Australian Society for Microbiology, Australian Society of Operations Research, Ecological Society of Australia, Geological Society of Australia, Royal Australian Chemical Institute, and the Statistical Society of Australia.

Contact Details

Science Coordinator
Dr Perry Hartfield
Phone: +61 7 3138 2984
Email: p.hartfield@qut.edu.au

Education Coordinator
Ms Mary Ryan
Phone: +61 7 3138 3988
Email: me.ryan@qut.edu.au

Faculty of Education Office
Phone: +61 7 3138 3947
Fax: +61 7 3138 3949
Email: educationenq@qut.edu.au

Course Structure for Commencing Students in 2002

Students complete 192 credit points from units in the Bachelor of Applied Science degree (meeting all of the requirements of the core program and a major study), and 192 credit points from the Bachelor of Education (Primary) program. The science units and the units EDB001, MDB383, CLB376 and EDB430 are undertaken during the first five semesters of the double degree program.

Course structure - Major in Biochemistry

Year 1, Semester 1

EDB001	Teaching and Learning Studies 1: Teaching in New Times
LSB118	Life Science
PCB101	Physical Science
PCB142	Chemistry 1

Year 1, Semester 2

LSB238	Cell and Molecular Biology 1
MDB383	Using Technology In The Curriculum
NRB270	Animal and Plant Structure and Function
PCB242	Chemistry 2

Year 2, Semester 1

CLB376	Studies Of Society And Environment Curriculum
LSB308	
LSB338	
	Either
MAB101	Statistical Data Analysis 1
	Or
NRB100	Environmental Science

Year 2, Semester 2

EDB430	Primary Professional Practice 1: Classroom Management
LSB408	
LSB468	
LSB608	Protein Science

Year 3, Semester 1

LSB508	Advanced Metabolism
LSB527	Biomedical Research Technologies
	Either

Student Affairs office on 3864 3847. CLB334 is offered internally in semester 2.

Course structure - Major in Chemistry

Year 1, Semester 1

EDB001	Teaching and Learning Studies 1: Teaching in New Times
MAB100	Mathematical Sciences 1A
PCB101	Physical Science
PCB142	Chemistry 1

Year 1, Semester 2

MDB383	Using Technology In The Curriculum
PCB242	Chemistry 2
PCB260	Physics 1A
PCB434	Inorganic Chemistry

Year 2, Semester 1

CLB376	Studies Of Society And Environment Curriculum
NRB100	Environmental Science
PCB305	Principles of Physical Chemistry
PCB354	Structure and Mechanism in Organic Chemistry

Year 2, Semester 2

EDB430	Primary Professional Practice 1: Classroom Management
PCB414	Industrial and Environmental Analytical Chemistry
PCB444	Spectroscopy
PCB634	Organometallic and Coordination Chemistry

Year 3, Semester 1

LSB118	Life Science
PCB505	Advanced Physical Chemistry
PCB554	Synthesis and Reactivity in Organic Chemistry
	One of
PCB514	Instrumental Analysis
PCB584	Forensic Examination of Physical Evidence
PCB604	Project

Year 3, Semester 2

CLB454	Language And Literacy Curriculum
EDB431	Primary Professional Practice 2: Curriculum Decision Making
MDB384	Science Education
SPB001	Human Development and Education

Year 4, Semester 1

CLB413	Programming And Assessment In Language And Mathematics
EDB432	Primary Professional Practice 3: Inclusive Curriculum
HMB307	Health and Physical Education Curriculum (Primary)
MDB450	Primary Mathematics Curriculum

Year 4, Semester 2

CLB306	Understanding Educational Practices
EDB433	Primary Professional Practice 4: Beginning Teaching
KKB914	Visual and Performing Arts Curriculum 1
SPB002	Psychology of Learning and Teaching

NOTES

Students with an approved LOTE background in their undergraduate degree who wish to undertake CLB334 Primary LOTE Curriculum Studies in place of CLB413 should contact the Student Affairs office on 3864 3847. CLB334 is offered internally in semester 2.

Course structure - Major in Ecology

Year 1, Semester 1

EDB001	Teaching and Learning Studies 1: Teaching in New Times
LSB118	Life Science
NRB100	Environmental Science
PCB101	Physical Science

Year 1, Semester 2

MAB101	Statistical Data Analysis 1
MDB383	Using Technology In The Curriculum
NRB270	Animal and Plant Structure and Function
NRB410	

Year 2, Semester 1

CLB376	Studies Of Society And Environment Curriculum
NRB311	
NRB312	Experimental Design
NRB370	

Year 2, Semester 2

EDB430	Primary Professional Practice 1: Classroom Management
NRB411	Ecological Methods
NRB470	
NRB611	Conservation Biology

Year 3, Semester 1

NRB510	Population Genetics
NRB511	Population Management
NRB572	Terrestrial Ecosystems
	One Science Elective

Year 3, Semester 2

CLB454	Language And Literacy Curriculum
EDB431	Primary Professional Practice 2: Curriculum Decision Making
MDB384	Science Education
SPB001	Human Development and Education

CLB413	Programming And Assessment In Language And Mathematics
EDB432	Primary Professional Practice 3: Inclusive Curriculum
HMB307	Health and Physical Education Curriculum (Primary)
MDB450	Primary Mathematics Curriculum

Year 4, Semester 2

CLB306	Understanding Educational Practices
EDB433	Primary Professional Practice 4: Beginning Teaching
KKB914	Visual and Performing Arts Curriculum 1
SPB002	Psychology of Learning and Teaching

NOTES

Students with an approved LOTE background in their undergraduate degree who wish to undertake CLB334 Primary LOTE Curriculum Studies in place of CLB413 should contact the Student Affairs office on 3864 3847. CLB334 is offered internally in semester 2.

Course structure - Major in Environmental Science

Year 1, Semester 1

EDB001	Teaching and Learning Studies 1: Teaching in New Times
MAB101	Statistical Data Analysis 1
NRB100	Environmental Science
PCB101	Physical Science

Year 1, Semester 2

LSB118	Life Science
MDB383	Using Technology In The Curriculum
NRB232	Environmental Geology
PCB142	Chemistry 1

Year 2, Semester 1

CLB376	Studies Of Society And Environment Curriculum
NRB300	Environmental Monitoring
NRB311	
	One of
NRB370	
NRB371	
ITB843	Computing Applications

Year 2, Semester 2

EDB430	Primary Professional Practice 1: Classroom Management
NRB400	Environmental Systems
NRB440	Environmental Chemistry
NRB600	Sustainable Environmental Management

Year 3, Semester 1

NRB500	Environmental Systems and Modelling
NRB501	Spatial Analysis of Environmental Systems
NRB572	Terrestrial Ecosystems
	One Science Elective

Year 3, Semester 2

CLB454	Language And Literacy Curriculum
EDB431	Primary Professional Practice 2: Curriculum Decision Making
MDB384	Science Education
SPB001	Human Development and Education

Year 4, Semester 1

CLB413	Programming And Assessment In Language And Mathematics
EDB432	Primary Professional Practice 3: Inclusive Curriculum
HMB307	Health and Physical Education Curriculum (Primary)
MDB450	Primary Mathematics Curriculum

Year 4, Semester 2

CLB306	Understanding Educational Practices
EDB433	Primary Professional Practice 4: Beginning Teaching
KKB914	Visual and Performing Arts Curriculum 1
SPB002	Psychology of Learning and Teaching

NOTES

Students with an approved LOTE background in their undergraduate degree who wish to undertake CLB334 Primary LOTE Curriculum Studies in place of CLB413 should contact the Student Affairs office on 3864 3847. CLB334 is offered internally in semester 2.

Course structure - Major in Geology

Year 1, Semester 1

EDB001	Teaching and Learning Studies 1: Teaching in New Times
MAB100	Mathematical Sciences 1A
NRB100	Environmental Science
PCB101	Physical Science

Year 1, Semester 2

MAB101	Statistical Data Analysis 1
MDB383	Using Technology In The Curriculum
NRB230	Planet Earth

PCB142	Chemistry 1	

Year 2, Semester 1

CLB376	Studies Of Society And Environment Curriculum
NRB331	
NRB333	
NRB334	Mineral Deposits And Mine Geology

Year 2, Semester 2

EDB430	Primary Professional Practice 1: Classroom Management
NRB434	
NRB436	
NRB633	Hydrogeology
SCB222	Exploration of the Universe

Year 3, Semester 1

NRB533	Advanced Geological Mapping
NRB534	Geophysics
NRB536	Petrology and Geochemistry
	One Science Elective
NOTE:	The major component in assessment and teaching of NRB533 is conducted as a field program during July.

Year 3, Semester 2

CLB454	Language And Literacy Curriculum
EDB431	Primary Professional Practice 2: Curriculum Decision Making
MDB384	Science Education
SPB001	Human Development and Education

Year 4, Semester 1

CLB413	Programming And Assessment In Language And Mathematics
EDB432	Primary Professional Practice 3: Inclusive Curriculum
HMB307	Health and Physical Education Curriculum (Primary)
MDB450	Primary Mathematics Curriculum

Year 4, Semester 2

CLB306	Understanding Educational Practices
EDB433	Primary Professional Practice 4: Beginning Teaching
KKB914	Visual and Performing Arts Curriculum 1
SPB002	Psychology of Learning and Teaching
	In 2002 EDB432 will be available in semester 2 to students who do not successfully complete the requirements of the unit in semester 1. This offering will be in external mode only.

NOTES

Students with an approved LOTE background in their undergraduate degree who wish to undertake CLB334 Primary LOTE Curriculum Studies in place of CLB413 should contact the Student Affairs office on 3864 3847. CLB334 is offered internally in semester 2.

Course structure - Major in Mathematics (WITH Maths C)

Year 1, Semester 1

EDB001	Teaching and Learning Studies 1: Teaching in New Times
MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C

Year 1, Semester 2

MAB210	Statistical Modelling 1
MAB220	Computational Mathematics 1
MDB383	Using Technology In The Curriculum
PCB101	Physical Science

Year 2, Semester 1

CLB376	Studies Of Society And Environment Curriculum
	One Science Elective
	Two Level 2 Mathematics units # - available units are:
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2

Year 2, Semester 2

EDB430	Primary Professional Practice 1: Classroom Management
	Two Level 2 Mathematics units- available units are:
MAB315	Operations Research 2
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB420	Computational Mathematics 2
MAB422	Mathematical Modelling
	One Level 3 Mathematics units - available units are:
MAB621	Discrete Mathematics
MAB623	Financial Mathematics
NOTE:	Students must complete at least one of MAB311, MAB312, MAB413

Year 3, Semester 1

	One Science Elective
	Three Level 3 Mathematics units - available units are:
MAB521	Applied Mathematics 3
MAB522	Computational Mathematics 3

MAB523	Introduction to Quality Management
MAB524	Statistical Inference
MAB525	Operations Research 3A
MAB672	Advanced Mathematical Modelling

Year 3, Semester 2

CLB454	Language And Literacy Curriculum
EDB431	Primary Professional Practice 2: Curriculum Decision Making
MDB384	Science Education
SPB001	Human Development and Education

Year 4, Semester 1

CLB413	Programming And Assessment In Language And Mathematics
EDB432	Primary Professional Practice 3: Inclusive Curriculum
HMB307	Health and Physical Education Curriculum (Primary)
MDB450	Primary Mathematics Curriculum

Year 4, Semester 2

CLB306	Understanding Educational Practices
EDB433	Primary Professional Practice 4: Beginning Teaching
KKB914	Visual and Performing Arts Curriculum 1
SPB002	Psychology of Learning and Teaching

NOTES

Students with an approved LOTE background in their undergraduate degree who wish to undertake CLB334 Primary LOTE Curriculum Studies in place of CLB413 should contact the Student Affairs office on 3864 3847. CLB334 is offered internally in semester 2.

Course structure - Major in Mathematics (WITHOUT Maths C)

Year 1, Semester 1

EDB001	Teaching and Learning Studies 1: Teaching in New Times
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
PCB101	Physical Science

Year 1, Semester 2

MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MDB383	Using Technology In The Curriculum

Year 2, Semester 1

CLB376	Studies Of Society And Environment Curriculum
MAB220	Computational Mathematics 1

	Three Level 2 Mathematics units - available units are:
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2

Year 2, Semester 2

EDB430	Primary Professional Practice 1: Classroom Management
	Two Level 2 Mathematics units - available units are:
MAB315	Operations Research 2
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB420	Computational Mathematics 2
MAB422	Mathematical Modelling
	One Level 3 Mathematics units - available units are:
MAB621	Discrete Mathematics
MAB623	Financial Mathematics
NOTE:	Students must complete at least one of MAB311, MAB312, MAB413

Year 3, Semester 1

	One Science Elective
	Three Level 3 Mathematics units - available units are:
MAB521	Applied Mathematics 3
MAB522	Computational Mathematics 3
MAB523	Introduction to Quality Management
MAB524	Statistical Inference
MAB525	Operations Research 3A
MAB672	Advanced Mathematical Modelling

Year 3, Semester 2

CLB454	Language And Literacy Curriculum
EDB431	Primary Professional Practice 2: Curriculum Decision Making
MDB384	Science Education
SPB001	Human Development and Education

Year 4, Semester 1

CLB413	Programming And Assessment In Language And Mathematics
EDB432	Primary Professional Practice 3: Inclusive Curriculum
HMB307	Health and Physical Education Curriculum (Primary)
MDB450	Primary Mathematics Curriculum

Year 4, Semester 2

CLB306	Understanding Educational Practices

EDB433	Primary Professional Practice 4: Beginning Teaching
KKB914	Visual and Performing Arts Curriculum 1
SPB002	Psychology of Learning and Teaching

NOTES

Students with an approved LOTE background in their undergraduate degree who wish to undertake CLB334 Primary LOTE Curriculum Studies in place of CLB413 should contact the Student Affairs office on 3864 3847. CLB334 is offered internally in semester 2.

Course structure - Major in Microbiology

Year 1, Semester 1

LSB118	Life Science
PCB101	Physical Science
PCB142	Chemistry 1
EDB001	Teaching and Learning Studies 1: Teaching in New Times

Year 1, Semester 2

LSB238	Cell and Molecular Biology 1
MDB383	Using Technology In The Curriculum
NRB270	Animal and Plant Structure and Function
PCB242	Chemistry 2

Year 2, Semester 1

CLB376	Studies Of Society And Environment Curriculum
LSB308	
LSB338	
	Either
MAB101	Statistical Data Analysis 1
	Or
NRB100	Environmental Science

Year 2, Semester 2

EDB430	Primary Professional Practice 1: Classroom Management
LSB408	
LSB428	
LSB657	Perspectives in Life Science

Year 3, Semester 1

LSB528	Environmental Microbiology
LSB547	Bacterial Pathogenesis and Disease Diagnosis
LSB578	Virology
	One Science Elective

Year 3, Semester 2

CLB454	Language And Literacy Curriculum
EDB431	Primary Professional Practice 2: Curriculum Decision Making

MDB384	Science Education
SPB001	Human Development and Education

Year 4, Semester 1

CLB413	Programming And Assessment In Language And Mathematics
EDB432	Primary Professional Practice 3: Inclusive Curriculum
HMB307	Health and Physical Education Curriculum (Primary)
MDB450	Primary Mathematics Curriculum

Year 4, Semester 2

CLB306	Understanding Educational Practices
EDB433	Primary Professional Practice 4: Beginning Teaching
KKB914	Visual and Performing Arts Curriculum 1
SPB002	Psychology of Learning and Teaching

NOTES

Students with an approved LOTE background in their undergraduate degree who wish to undertake CLB334 Primary LOTE Curriculum Studies in place of CLB413 should contact the Student Affairs office on 3864 3847. CLB334 is offered internally in semester 2.

Course structure - Major in Physics

Year 1, Semester 1

MAB101	Statistical Data Analysis 1
PCB101	Physical Science
PCB107	
	Either
MAB131	Engineering Mathematics 1A
	Or
MAB180	Engineering Mathematics 1B
EDB001	Teaching and Learning Studies 1: Teaching in New Times

Year 1, Semester 2

MDB383	Using Technology In The Curriculum
MAB132	Engineering Mathematics 2A
PCB250	Physics 1
PCB260	Physics 1A

Year 2, Semester 1

CLB376	Studies Of Society And Environment Curriculum
MAB134	Electrical Engineering Mathematics 3
PCB361	AC Theory and Electronics
PCB362	Physics 2

Year 2, Semester 2

EDB430	Primary Professional Practice 1: Classroom Management

PCB404	Scientific Principles of Safety
PCB460	Instrumentation and Computational Methods
PCB462	Thermodynamics and Solid State Physics

Virologist.

Year 3, Semester 1

	One Science Elective unit
PCB561	Quantum and Condensed Matter Physics
PCB562	Physical Methods of Analysis
PCB661	Experimental Physics

Year 3, Semester 2

CLB454	Language And Literacy Curriculum
EDB431	Primary Professional Practice 2: Curriculum Decision Making
MDB384	Science Education
SPB001	Human Development and Education

Year 4, Semester 1

CLB413	Programming And Assessment In Language And Mathematics
EDB432	Primary Professional Practice 3: Inclusive Curriculum
HMB307	Health and Physical Education Curriculum (Primary)
MDB450	Primary Mathematics Curriculum

Year 4, Semester 2

CLB306	Understanding Educational Practices
EDB433	Primary Professional Practice 4: Beginning Teaching
KKB914	Visual and Performing Arts Curriculum 1
SPB002	Psychology of Learning and Teaching
NOTE:	In 2002 EDB432 will be available in Semester 2 to students who do not successfully complete the requirements of the unit in Semester 1. This offering will be in external mode only.

NOTES

Students with an approved LOTE background in their undergraduate degree who wish to undertake CLB334 Primary LOTE Curriculum Studies in place of CLB413 should contact the Student Affairs office on 3864 3847. CLB334 is offered internally in semester 2.

Potential Careers:

Actuary, Analytical Chemist, Astrophysicist, Biochemist, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Database Manager, Ecologist, Educator, Environmental Scientist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, Industrial Chemist, Laboratory Technician (Chemistry), Marine Scientist, Mathematician, Medical Biotechnologist, Medical Physicist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Physicist, Plant Biotechnologist, Population Ecologist, Primary School Teacher, Programmer, Quantitative Analyst, Statistician, Teacher,

Bachelor of Arts/Bachelor of Applied Science (IF86)

Year offered: 2009
Admissions: No
Course duration (full-time): 4 Years
Domestic fees (indicative): 2009: CSP $2,601 (indicative) per semester
Past rank cut-off: 72; Dfee: 68
Past OP cut-off: 13; Dfee: 15
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or **Total credit points:** 384 (192 cp in the Bachelor of Arts and 192 cp in the Bachelor of Applied Science)
Standard credit points per full-time semester: 48
Course coordinator: Dr Iraphne Childs (Humanities): Dr Perry Hartfield (Science)
Discipline coordinator: Dr Perry Hartfield (Biochemistry); Dr Marion Bateson (Biotechnology); Dr Robert Johnson (Chemistry); Dr Ian Williamson (Ecology); Dr Robin Thwaites (Environmental Science); Dr Emad Kiriakous (Forensic Science); Dr Gary Huftile (Geoscience); Dr Scott McCue (Mathematics); Dr Christine Knox (Microbiology); Dr Greg Michael (Physics)
Campus: Gardens Point and Kelvin Grove

Career Opportunities

As a graduate of this course you will receive both a Bachelor of Arts degree and a Bachelor of Applied Science degree. This combination of degrees provides a valuable foundation for a wide range of careers in areas such as government, diplomacy, higher education and public service. Opportunities in tourism, translation, and the hospitality industry are open to those with a Language major. Complementary majors chosen from Arts and Science provide an excellent background for careers in environmental management.

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.

Contact Details

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Science Coordinator
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Email: p.hartfield@qut.edu.au

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Microbiology
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Physics
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Course is under review

QUT is currently reviewing the Arts and Social Science programs to ensure they continue to meet the needs of students and employers. As a result these programs may change in 2008 or may not be offered. You can register for

updates on the status of these courses by visiting the Humanities Program website.

(Example of Full-Time Course Structure for Commencing Students)

Year 1, Semester 1

Core Arts unit (major)

Core Arts unit (major)

Two Science units (SC01 Level 1): Foundation units

Year 1, Semester 2

Arts Major unit

Arts Major unit

Two Science units (SC01 Level 1): at least one Foundation unit

Year 2, Semester 1

Core Arts unit (major or skills)

Core Arts unit (major or skills)

Two Science units (SC01 Levels 1 and 2: Level 2 from Major)

Year 2, Semester 2

Arts Major unit

Arts Minor unit

Two Science Units (SC01 Levels 1 and 2: Level 2 from Major)

Year 3, Semester 1

Arts Major unit

Core Arts unit (research methods)

Two Science Major units (SC01 Level 2)

Year 3, Semester 2

Arts Minor unit

Core Arts unit (research methods)

Two Science Major units (SC01 Level 3)

Year 4, Semester 1

Arts Major unit

Arts Minor unit

Two Science Major units (SC01 Level 3)

Year 4, Semester 2

Arts Major unit

Arts Minor unit

Two Science Major units (SC01 Level 3)

Course structure - Major in Biochemistry

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation

Year 3, Semester 2

LQB481	Biochemical Pathways and Metabolism
LQB483	Molecular Biology Techniques

Year 4, Semester 1

LQB581	Functional Biochemistry
LQB582	Biomedical Research Technologies

Year 4, Semester 2

LQB681	Biochemical Research Skills
LQB682	Protein Biochemistry and Bioengineering

Course structure - Major in Biotechnology

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation

Year 3, Semester 2

LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics

Year 4, Semester 1

	TWO units selected from:
LQB583	Genetic Research Technology
LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation

Year 4, Semester 2

	TWO units selected from:
LQB682	Protein Biochemistry and Bioengineering
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions

Course structure - Major in Chemistry

Year 1, Semester 1

SCB111	Chemistry 1
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

SCB112	Cellular Basis of Life
SCB121	Chemistry 2

Year 2, Semester 1

MAB100	Mathematical Sciences 1A
SCB110	Science Concepts and Global Systems

Year 2, Semester 2

SCB123	Physical Science Applications
SCB131	Experimental Chemistry

Year 3, Semester 1

PQB312	Analytical Chemistry For Scientists and Technologists
PQB331	Structure and Bonding

Year 3, Semester 2

PQB401	Reaction Kinetics, Thermodynamics and Mechanisms
PQB442	Chemical Spectroscopy

Year 4, Semester 1

PQB502	Materials Chemistry and Characterisation
PQB531	Organic Mechanisms and Synthesis

Year 4, Semester 2

PQB631	Advanced Inorganic Chemistry
PQB642	Chemical Research

Course structure - Major in Ecology

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB122	Cell and Molecular Biology

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

NQB201	Planet Earth
NQB202	History of Life on Earth

Year 3, Semester 1

NQB302	Earth Surface Systems
NQB321	Ecology

Year 3, Semester 2

NQB421	Experimental Design
NQB422	Genetics and Evolution

Year 4, Semester 1

NQB521	Population Genetics and Molecular Ecology
NQB523	Population Management

Year 4, Semester 2

NQB622	Conservation Biology
NQB623	Ecological Systems

Course structure - Major in Environmental Science

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Plus either:

MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

NQB202	History of Life on Earth
SCB123	Physical Science Applications

Year 3, Semester 1

NQB302	Earth Surface Systems
NQB321	Ecology

Year 3, Semester 2

NQB403	Soils and the Environment
NQB421	Experimental Design

Year 4, Semester 1

NQB501	Environmental Modelling
NQB502	Field Mapping and Monitoring of Natural Resources

Year 4, Semester 2

NQB601	Sustainable Environmental Management
NQB602	Environmental Chemistry

Course structure - Major in Forensic Science

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

SCB121	Chemistry 2
SCB122	Cell and Molecular Biology

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

SCB123	Physical Science Applications
SCB131	Experimental Chemistry

Year 3, Semester 1

LQB383	Molecular and Cellular Regulation
SCB384	Forensic Sciences - From Crime Scene to Court

Year 3, Semester 2

JSB979	Forensic Scientific Evidence
PQB312	Analytical Chemistry For Scientists and Technologists

Year 4, Semester 1

PQB513	Instrumental Analysis
PQB584	Forensic Physical Evidence

Year 4, Semester 2

LQB680	Forensic DNA Profiling
PQB684	Forensic Analysis

Course structure - Major in Geoscience

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

NQB201	Planet Earth
SCB123	Physical Science Applications

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

NQB202	History of Life on Earth
SCB222	Exploration of the Universe

Year 3, Semester 1

NQB311	Mineralogy
NQB314	Sedimentary Geology

Year 3, Semester 2

NQB411	Petrology of Igneous and Metamorphic Rocks
NQB412	Structural Geology and Field Methods

Year 4, Semester 1

NQB502	Field Mapping and Monitoring of Natural Resources
NQB513	Geophysics

Year 4, Semester 2

NQB602	Environmental Chemistry
NQB614	Groundwater Systems

Course structure - Major in Mathematics (WITH Mathematics C from Senior)

Year 1, Semester 1

MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B

Year 1, Semester 2	
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1

Year 2, Semester 1	
MAB220	Computational Mathematics 1
	One Science unit - selected from:
SCB110	Science Concepts and Global Systems
SCB112	Cellular Basis of Life

Year 2, Semester 2	
	Science elective unit
	One Science unit - selected from:
SCB110	Science Concepts and Global Systems
SCB112	Cellular Basis of Life

Year 3, Semester 1	
	Two Level 2 Mathematics units* - available units are:
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2
*	Students must complete at least one of MAB311, MAB312, MAB413

Year 3, Semester 2	
	Two Level 2 Mathematics units* - available units are:
MAB315	Operations Research 2
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB420	Computational Mathematics 2
MAB422	Mathematical Modelling
MAB480	Introduction to Scientific Computation
*	Students must complete at least one of MAB311, MAB312, MAB413

Year 4, Semester 1	
	Two Level 3 Mathematics units - available units are:
MAB521	Applied Mathematics 3
MAB522	Computational Mathematics 3
MAB523	Introduction to Quality Management
MAB525	Operations Research 3A
MAB526	Statistical Science 3
MAB672	Advanced Mathematical Modelling

Year 4, Semester 2	
	Two Level 3 Mathematics units - available units are
MAB524	Statistical Inference

MAB613	Partial Differential Equations
MAB621	Discrete Mathematics
MAB623	Financial Mathematics
MAB624	Applied Statistics 3
MAB625	Operations Research 3B

Course structure - Major in Mathematics (WITHOUT Mathematics C from Senior)

Year 1, Semester 1	
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1

Year 1, Semester 2	
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C

Year 2, Semester 1	
MAB220	Computational Mathematics 1
	One Science unit - selected from:
SCB110	Science Concepts and Global Systems
SCB112	Cellular Basis of Life

Year 2, Semester 2	
MAB210	Statistical Modelling 1
	One Science unit - selected from:
SCB110	Science Concepts and Global Systems
SCB112	Cellular Basis of Life

Year 3, Semester 1	
	Two Level 2 Mathematics units* - available units are:
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2
*	Students must complete at least one of MAB311, MAB312, MAB413

Year 3, Semester 2	
	Two Level 2 Mathematics units* - available units are:
MAB315	Operations Research 2
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB420	Computational Mathematics 2
MAB422	Mathematical Modelling
MAB480	Introduction to Scientific Computation
*	Students must complete at least one of MAB311, MAB312, MAB413

Year 4, Semester 1	
	Two Level 3 Mathematics units - available units

are:

MAB521	Applied Mathematics 3	
MAB522	Computational Mathematics 3	
MAB523	Introduction to Quality Management	
MAB525	Operations Research 3A	
MAB526	Statistical Science 3	
MAB672	Advanced Mathematical Modelling	

Two Level 3 Mathematics units - available units are:

MAB524	Statistical Inference
MAB613	Partial Differential Equations
MAB621	Discrete Mathematics
MAB623	Financial Mathematics
MAB624	Applied Statistics 3
MAB625	Operations Research 3B

Course structure - Major in Microbiology

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB386	Microbial Structure and Function

Year 3, Semester 2

LQB483	Molecular Biology Techniques
LQB486	Clinical Microbiology 1

Year 4, Semester 1

LQB586	Clinical Microbiology 2
LQB587	Applied Microbiology 1: Water, Air and Soil

Year 4, Semester 2

LQB686	Microbial Technology and Immunology
LQB687	Applied Microbiology 2: Food and Quality Assurance

Course structure - Major in Physics

Year 1, Semester 1

MAB111	Mathematical Sciences 1B
SCB111	Chemistry 1

Year 1, Semester 2

MAB112	Mathematical Sciences 1C
PQB250	Mechanics and Electromagnetism

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
SCB112	Cellular Basis of Life

Year 2, Semester 2

MAB220	Computational Mathematics 1
PQB251	Waves and Optics

Year 3, Semester 1

MAB311	Advanced Calculus
PQB350	Thermodynamics of Solids and Gases

Year 3, Semester 2

PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation

Year 4, Semester 1

PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques

Year 4, Semester 2

PQB650	Advanced Theoretical Physics
PQB651	Experimental Physics

Potential Careers:

Academic, Actuary, Administrator, Analytical Chemist, Astrophysicist, Biochemist, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Corporate Secretary, Database Manager, Ecologist, Environmental Health Officer, Environmental Scientist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Government Officer, Health Physicist, Higher Education Worker, Hydrogeologist, Immunologist, Industrial Chemist, Information Officer, Laboratory Technician (Chemistry), Manager, Mapping Scientist/Photogrammetrist, Marine Scientist, Mathematician, Medical Biotechnologist, Medical Physicist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Network Administrator, Network Manager, Physicist, Plant Biotechnologist, Policy Officer, Population Ecologist, Programmer, Project Developer, Project Manager, Public Servant, Quantitative Analyst, Statistician, Virologist.

Master of Business Administration/Master of Information Technology 1 (IF98)

Year offered: 2009
Admissions: No
CRICOS code: 037551G
Domestic fees (indicative): 2009: $11,500 (indicative) per semester
Total credit points: 240
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Lyndal Drennan, MBA Director. Email: bgsbenq@qut.edu.au

Course Discontinuation

Students should note that this course has been discontinued and there will be no further intake. However, students who are currently enrolled, or have already been made an offer into this course for 2005, are able to remain enrolled in it.

Potential Careers:

Administrator, Business Analyst, Data Communications Specialist, Database Manager, Electronic Commerce Developer, Network Administrator, Network Manager, Programmer, Systems Analyst, Systems Manager, Systems Programmer.

Bachelor of Games and Interactive Entertainment (IT04)

Year offered: 2009
Admissions: Yes
CRICOS code: 059710E
Course duration (full-time): 3 years
Domestic fees (indicative): 2009: CSP $3,671 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 416102
Past rank cut-off: 75
Past OP cut-off: 13
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths A, B or C (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 288
Course coordinator: Associate Professor Ruth Christie
Campus: Gardens Point

Course Overview

The Bachelor of Games and Interactive Entertainment gives you the opportunity to join the growing industry of digital entertainment and electronic games by acquiring expertise in the development of computer games and other forms of interactive media. The course has a strong foundation in both entertainment technology and creative skills. You can choose your primary area of study, also known as your major, from:

Animation: animation and motion graphics, 3D computer graphics and computer generated art
Digital Media: mixing graphics, video, animation and sound to meet the increasingly complex world of digital entertainment
Game Design: game design tools and design processes, narrative and immersion, architecture and interior design
Software Technologies: technical aspects of computer games, games engine and tools development

You will gain experience in the whole process of game and interaction development, from identification and evaluation of ideas, creation of design concepts, critique of existing and potential products, analysis of cultural impact and industry trends, right through to the development and delivery of a final product.

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, quality assurance tester, games/digital media reviewer, video game tester, sound designer, mobile entertainment and communications developer, web developer or digital product strategist.

Scholarships

If you wish to enrol in the Bachelor of Information Technology, you may like to consider our Dean's Scholars Program for OP1-2 students. If you are a female high school student, you may also apply for our âgo for IT gURLâ merit scholarships.

Find out more about the range of scholarships available.

Cooperative Education Program

The School of ITâs 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 youâre 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

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

Students completing the Software Technologies Major would be eligible for membership of the Australian Computer Society (ACS).

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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances. Find out more on deferment.

Bachelor of Games & Interactive Entertainment Course structure

The course consists of four blocks of studies
Block A: Core Studies (6 units plus a 24 credit point Project completed in Semester 6)
Block B: Major (8 units) selected from Animation; Digital Media; Games Design; Software Technologies
Block C: Minor (4 units)
Block D: Electives (4 units)
The Cooperative Education Programs are replacements for general IT electives

Year 1, Semester 1	
INB180	Computer Games Studies
INB104	Building IT Systems
INB103	Industry Insights
INB204	Special Topic 1

Year 1, Semester 2	
INB181	Introduction to Games Production
	Block B or Block C Unit
	Block B or Block C Unit
	Block B or Block C Unit

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

Year 2, Semester 2	
	Block B or Block C or Block D Unit
	Block B or Block C or Block D Unit
	Block B or Block C or Block D Unit
	Block B or Block C or Block D Unit

Year 3, Semester 1	
INB379	Game Project Design
	Block B or Block C or Block D Unit
	Block B or Block C or Block D Unit
	Block B or Block C or Block D Unit

Year 3, Semester 2	
INB380	Games Project
	Block B or Block C or Block D Unit
	Block B or Block C or Block D Unit
	Note: Coop Ed students replace INB380 with

INS011 and INS012

Bachelor of Games & Interactive Entertainment Majors Course structure

Animation	
KIB105	Animation and Motion Graphics
KIB108	Animation History and Practices
KIB225	Character Development, Conceptual Design and Animation Layout
KIB203	Introduction to 3D Computer Graphics
KIB325	Real-Time 3D Computer Graphics
KIB316	Virtual Environments
KVB105	Drawing for Design
KVB106	Drawing for Animation

Digital Media	
KIB101	Visual Communication
KIB102	Visual Interactions
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
INB345	Mobile Devices
KIB230	Interface and Information Design
KIB309	Embodied Interactions
KIB314	Tangible Media

Game Design	
INB281	Advanced Game Design
INB280	Fundamentals of Game Design
INB272	Interaction Design
KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion
KIB214	Design for Interactive Media
AND	Two units selected from the following:
DEB201	Digital Communication
DAB110	Architectural Design 1
DTB101	Interior Design 1
DNB101	Industrial Design 1

Software Technologies*	
	* Requirements for this Major is a SA or better in Queensland Maths B (or equivalent)
INB270	Programming
INB210	Databases
INB250	Systems Architecture
INB371	Data Structures and Algorithms
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
INB370	Software Development
MAB281	Mathematics for Computer Graphics

| OR | null |
| INB304 | Special Topic 3 |

Bachelor of Games & Interactive Entertainment Minors Course structure

Students select a Minor from the following

Animation
KIB105	Animation and Motion Graphics
KVB105	Drawing for Design
KVB106	Drawing for Animation
KIB108	Animation History and Practices

Advanced Animation#
| KIB212 | Animation Studio 1: Preproduction |
| KIB213 | Animation Studio 2: CG Toolkit |

#Entry into this minor is limited to IT04 students enrolled in the Animation Major, who have completed at least 96 credit points of study, and have gained an average grade of 5.0 or above across the following units from the Animation Major: KIB105, KIB108, KVB105, KVB106.

Advanced Software Technologies
INB365	Systems Programming
INB372	Software Engineering Principles
INB374	Enterprise Software Architecture
INB382	Real Time Rendering Techniques
OR	null
INB304	Special Topic 3

Only available to students doing the Software Technologies major

Digital Media
KIB101	Visual Communication
KIB102	Visual Interactions
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems

Entrepeneurship
BSB115	Management
MGB223	Entrepreneurship and Innovation
MGB324	Managing Business Growth

Plus one from the following:
| BSB126 | Marketing |
| MGB200 | Leading Organisations |

Game Design
KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion
INB280	Fundamentals of Game Design

INB281	Advanced Game Design
OR	null
INB272	Interaction Design

Legal Issues
| LWB141 | Legal Institutions and Method |
| LWB136 | Contracts A |

Two units selected from the following
LWB137	Contracts B
LWB142	Law, Society and Justice
LWB480	Media Law
LWB482	Internet Law
LWB486	Intellectual Property Law

Marketing
| BSB126 | Marketing |

Three units selected from the following
AMB251	Innovation and Brand Management
AMB240	Marketing Planning and Management
AMB201	Marketing and Audience Research
AMB359	Strategic Marketing

Mathematics for Games#
MAB100	Mathematical Sciences 1A
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB312	Linear Algebra

Students who have completed Maths C can substitute MAB100 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
KMB105	Music and Sound Technology
KMB106	Music and Sound for Multimedia
KMB107	Sound, Image, Text
KMB108	Sound Recording and Acoustics

Software Technologies
INB270	Programming
INB210	Databases
INB250	Systems Architecture
INB371	Data Structures and Algorithms

This minor is not available to students who are undertaking the Software Technologies Major

Physics for Games

MAB111	Mathematical Sciences 1B
PQB250	Mechanics and Electromagnetism
PQB251	Waves and Optics
	Choose 1 from the following
PQB450	Energy, Fields and Radiation
PQB460	Astrophysics 1
PCB593	Digital Image Processing

IT Elective List

IT Elective Units	
INB123	Project Management Practice
INB221	Technology Management
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
INB313	Electronic Commerce Site Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
INB320	Business Process Modelling
INB321	Business Process Management
INB322	Information Systems Consulting
INB323	Smart Services
INB330	Information Management
INB331	Management Issues for Info Professionals
INB333	Information Programs
INB334	Information Issues and Values
INB335	Information Resources
INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB353	Wireless and Mobile Networks
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles
INB374	Enterprise Software Architecture
INB204	Special Topic 1
INB205	Special Topic 2
INB300	Professional Practice in IT
INB304	Special Topic 3
INB305	Special Topic 4
INS350	CCNA 1&2 Network Fundamentals and Routing
INS352	CCNP1: Building Scalable Internetworks
INS351	CCNA 3&4 Lan Switching

INS353	CCNP 2: Building Multi Layered Switched Networks
INS354	CCNP3: Building Multi Layered Switched Networks
INS355	CCNP 4: Optimising Converged Networks
INB306	Project 1
INB307	Project 2
INB308	Project 3
INB365	Systems Programming
INB355	Cryptology and Protocols
INB860	Computational Intelligence for Control and Embedded Systems
INB346	Enterprise 2.0
INB345	Mobile Devices
INB347	Web 2.0 Applications
INB334	Information Issues and Values

Potential Careers:

Animator, Computer Game Programmer, Computer Games Developer, Computer Systems Engineer, Multimedia Designer, Programmer, Project Developer, Project Manager, Software Engineer, Technical Officer, Web Designer.

Bachelor of Games and Interactive Entertainment - Dean's Scholars Program (IT04)

Year offered: 2009
Admissions: Yes
Course duration (full-time): 3 years
Domestic fees (indicative): 2009: CSP $3,671 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
Assumed knowledge: English (4, SA) and Maths A, B or C (4, SA)
Course coordinator: Associate Professor Ruth Christie
Campus: Gardens Point

Course Overview

The Deanâs Scholars Program is an accelerated honours program allowing completion of the Bachelor of Games and Interactive Entertainment and an honours degree in three years instead of four years. This accelerated program is designed for students with an OP 1 or 2 (or equivalent), who can also demonstrate active involvement in their school and local community activities.

The Bachelor of Games and Interactive Entertainment gives you the opportunity to join the growing industry of digital entertainment and electronic games by acquiring expertise in the development of computer games and other forms of interactive media. The course has a strong foundation in both entertainment technology and creative skills. You can choose your primary area of study from Animation and Computational Arts, Digital Media, Game Design or Software Technologies.

You will gain experience in the whole process of game and interaction development, from identification and evaluation of ideas, creation of design concepts, critique of existing and potential products, analysis of cultural impact and industry trends, right through to the development and delivery of a final product.

Who should apply?

The program is open to applicants currently undertaking Year 12 studies at a secondary school, and who achieve an OP 1 or 2 (or interstate equivalent). Applicants must be outstanding current, or returning from a gap year, Year 12 students who completed their Year 12 education in Australia.

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.

OP Guarantee

The OP Guarantee does not apply to this program.

Deferment

QUT's deferment policy does not apply to this course.

Cooperative Education Program

The School of ITâs 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 youâre 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.

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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code

Further Information

Please contact the course coordinator, ASPRO Ruth Christie (07) 3138 2782 or enquiry.scitech@qut.edu.au

Bachelor of Games and Interactive Entertainment

Year 1, Semester 1	
INB180	Computer Games Studies
INB104	Building IT Systems
INB103	Industry Insights
INB204	Special Topic 1

Year 1, Semester 2	
INB181	Introduction to Games Production
	Block B or Block C Unit or Block D Unit
	Block B or Block C Unit or Block D Unit
	Block B or Block C Unit or Block D Unit

Year 2, Semester 1	
	Block B or Block C Unit or Block D Unit
	Block B or Block C Unit or Block D Unit
	Block B or Block C Unit or Block D Unit
	Block B or Block C Unit or Block D Unit

	Block B or Block C Unit or Block D Unit

	Block B or Block C or Block D Unit
	Block B or Block C or Block D Unit
	Block B or Block C or Block D Unit
	Block B or Block C or Block D Unit
INB379	Game Project Design

Year 2, Summer

INB380	Games Project

Year 3, Semester 1

	Block B or Block C or Block D Unit
	Block B or Block C or Block D Unit
	Block B or Block C or Block D Unit
	INN Honours Elective

Year 3, Semester 2

INN700	Introduction To Research
INN401	Honours Dissertation 1
	INN Honours Elective
	INN Honours Elective

Year 3, Summer

INN402	Honours Dissertation 2
INN403	Honours Dissertation 3
INN404	Honours Dissertation 4

Bachelor of Games & Interactive Entertainment Majors Course structure

Animation

KIB105	Animation and Motion Graphics
KIB108	Animation History and Practices
KIB225	Character Development, Conceptual Design and Animation Layout
KIB203	Introduction to 3D Computer Graphics
KIB325	Real-Time 3D Computer Graphics
KIB316	Virtual Environments
KVB105	Drawing for Design
KVB106	Drawing for Animation

Digital Media

KIB101	Visual Communication
KIB102	Visual Interactions
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
INB345	Mobile Devices
KIB230	Interface and Information Design
KIB309	Embodied Interactions
KIB314	Tangible Media

Game Design

INB281	Advanced Game Design
INB280	Fundamentals of Game Design
INB272	Interaction Design
KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion
KIB214	Design for Interactive Media
AND	Two units selected from the following:
DEB201	Digital Communication
DAB110	Architectural Design 1
DTB101	Interior Design 1
DNB101	Industrial Design 1

Software Technologies*

	* Requirements for this Major is a SA or better in Queensland Maths B (or equivalent)
INB270	Programming
INB210	Databases
INB250	Systems Architecture
INB371	Data Structures and Algorithms
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
INB370	Software Development
MAB281	Mathematics for Computer Graphics
OR	null
INB304	Special Topic 3

Bachelor of Games & Interactive Entertainment Minors Course structure

Students select a Minor from the following

Animation

KIB105	Animation and Motion Graphics
KVB105	Drawing for Design
KVB106	Drawing for Animation
KIB108	Animation History and Practices

Advanced Animation#

KIB212	Animation Studio 1: Preproduction
KIB213	Animation Studio 2: CG Toolkit
	#Entry into this minor is limited to IT04 students enrolled in the Animation Major, who have completed at least 96 credit points of study, and have gained an average grade of 5.0 or above across the following units from the Animation Major: KIB105, KIB108, KVB105, KVB106.

Advanced Software Technologies #

INB365	Systems Programming
INB372	Software Engineering Principles

INB374	Enterprise Software Architecture
INB382	Real Time Rendering Techniques
OR	null
INB304	Special Topic 3

Only available to students doing the Software Technologies major

Digital Media

KIB101	Visual Communication
KIB102	Visual Interactions
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems

Entrepeneurship

BSB115	Management
MGB223	Entrepreneurship and Innovation
MGB324	Managing Business Growth

Plus one from the following:

| BSB126 | Marketing |
| MGB200 | Leading Organisations |

Game Design

KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion
INB280	Fundamentals of Game Design
INB281	Advanced Game Design
OR	null
INB272	Interaction Design

Legal Issues

| LWB141 | Legal Institutions and Method |
| LWB136 | Contracts A |

Two units selected from the following

LWB137	Contracts B
LWB142	Law, Society and Justice
LWB480	Media Law
LWB482	Internet Law
LWB486	Intellectual Property Law

Marketing

| BSB126 | Marketing |

Three units selected from the following

AMB251	Innovation and Brand Management
AMB240	Marketing Planning and Management
AMB201	Marketing and Audience Research
AMB359	Strategic Marketing

Mathematics for Games#

MAB100	Mathematical Sciences 1A
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB312	Linear Algebra

Students who have completed Maths C can substitute MAB100 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

KMB105	Music and Sound Technology
KMB106	Music and Sound for Multimedia
KMB107	Sound, Image, Text
KMB108	Sound Recording and Acoustics

Software Technologies

INB270	Programming
INB210	Databases
INB250	Systems Architecture
INB371	Data Structures and Algorithms

This minor is not available to students who are undertaking the Software Technologies Major

Physics for Games

MAB111	Mathematical Sciences 1B
PQB250	Mechanics and Electromagnetism
PQB251	Waves and Optics

Choose 1 from the following

PQB450	Energy, Fields and Radiation
PQB460	Astrophysics 1
PCB593	Digital Image Processing

Potential Careers:

Animator, Computer Game Programmer, Computer Games Developer, Multimedia Designer, Programmer, Software Engineer, Web Designer.

Bachelor of Corporate Systems Management (IT06)

Year offered: 2009
Admissions: Yes
CRICOS code: 059712C
Course duration (full-time): 3 years
Domestic fees (indicative): 2009: CSP $3,801 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 416301
Past rank cut-off: 75
Past OP cut-off: 13
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths A, B or C (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 288
Course coordinator: Dr Taizan Chan
Campus: Gardens Point

Course Overview

The Bachelor of Corporate Systems Management will give students the skills and knowledge to identify and communicate business system needs, select the right information systems and integrate these systems into organisations to improve business performance.

The course is industry relevant and flexible, with the option to focus studies on areas such as IT management, enterprise systems, IT consulting, business process engineering, and knowledge management. Students will learn about, and come to understand, the interrelationship of information technology, business and client relations.

Career Outcomes

The professional skills gained from the Bachelor of Corporate Systems Management are applicable across all business domains. Students will gain knowledge and an understanding of how to work with people and clients, operations, systems and production, while learning how to apply a strategic focus in a management role.

As a graduate, students can expect to work as a business analyst or consultant, enterprise architect, information or knowledge strategist, ICT project manager or IT infrastructure manager.

Scholarships

If you wish to enrol in the Bachelor of Information Technology, you may like to consider our Dean's Scholars Program for OP1-2 students. If you are a female high school student, you may also apply for our âgo for IT gURLâ merit scholarships.

Find out more about the range of scholarships available.

Cooperative Education Program

The School of IT's Cooperative Education Program gives you the opportunity of 10-12 months paid industry placement during your course where you can integrate real experience with what you're learning in your degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNiTAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the Cooperative Education Program.

Professional Recognition

Recognition of the course by the Australian Computer Society (ACS) will be sought during 2007.

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.

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances. Find out more on deferment.

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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Further Information

For further information about this course, please contact the Course Co-ordinator Dr Taizan Chan (07)3138 2782 or enquiry.scitech@qut.edu.au

Bachelor of Corporate Systems Management

Course Structure

Year 1, Semester 1

INB103	Industry Insights
INB120	Corporate Systems
INB101	Impact of IT
INB122	Organisational Databases

Year 1, Semester 2

BSB115	Management
INB123	Project Management Practice
INB124	Information Systems Development
	Block B Unit

Year 2, Semester 1

INB220	Business Analysis
INB221	Technology Management
MGB223	Entrepreneurship and Innovation
	Block B Unit

Year 2, Semester 2

BSB126	Marketing
INB830	Web Sites For Electronic Commerce
	Block B Unit
	Block B Unit

Year 3, Semester 1

INB312	Enterprise Systems Applications
INB322	Information Systems Consulting
	Block B Unit
	Block B Unit

Year 3, Semester 2

INB320	Business Process Modelling
INB325	Corporate Systems Management Project
	Block B Unit
	Block B Unit

Block B: Complementary Studies

Students select unit set(s) from within the School of IT or from those offered by other Faculties at QUT. Alternatively, students may undertake eight elective units with the approval of the Course Coordinator.

Information Management/Information Technology Management

INB312	Enterprise Systems Applications
INB335	Information Resources

Adult and Community Leaning

SPB100	Introduction to Adult Learning and Development
SPB102	Professional Communication in Adult Learning Contexts

Finance

BSB113	Economics
BSB123	Data Analysis
EFB101	Data Analysis for Business
EFB102	Economics 2
EFB201	Financial Markets
EFB210	Finance 1
EFB307	Finance 2
EFB312	International Finance

Business Systems Engineering

INB210	Databases
INB270	Programming
INB311	Enterprise Systems
	Intermediate Level IT Elective

Creative Industries Management

KTB061	Creative Industries Management
KTB062	Creative Industries Events and Festivals
KTB104	Performance Innovation
KTB207	Staging Australia

Construction Management - Administration

UDB101	Stewardship of Land
UDB104	Urban Development Economics
UDB110	Residential Construction and Engineering
UDB111	Engineering Construction Materials

Databases

INB210	Databases
INB270	Programming
INB340	Database Design
INB342	Enterprise Data Mining
	Intermediate Level IT Elective

Forensics

BSB212	Electronic Business Applications
BSB213	Governance Issues in E-Business
BSB314	E-Business Intelligence
INB210	Databases
INB271	The Web
INB311	Enterprise Systems
INB342	Enterprise Data Mining

Entrepreneurship

AMB240	Marketing Planning and Management
AMB251	Innovation and Brand Management

Human Resource Management

MGB207	Human Resource Issues and Strategy
MGB211	Organisational Behaviour

MGB314   Organisational Consulting and Change

International Studies

HHB107	World Regions
HHB223	Islam and Islamic Societies
HHB263	Politics Of Globalisation

Law

LWB136	Contracts A
LWB137	Contracts B
LWB141	Legal Institutions and Method
LWB142	Law, Society and Justice
LWB144	Laws and Global Perspectives
LWB482	Internet Law
LWB484	Electronic Commerce and Technology Contracts

Management

MGB210	Managing Operations
MGB211	Organisational Behaviour
MGB220	Business Research Methods
MGB222	Managing Organisations
MGB309	Strategic Management
MGB334	Managing in a Changing Environment

Marketing

AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research
AMB240	Marketing Planning and Management
AMB241	E-Marketing Strategies
AMB341	Strategic Marketing

Organisational Psychology

PYB007	Interpersonal Processes and Skills
PYB012	Psychology
PYB205	Social Psychology
PYB302	Industrial and Organisational Psychology

Public Health

PUB251	Contemporary Public Health
PUB326	Epidemiology
PUB329	Foundations of Health Studies and Health Behaviour
PUB406	Health Promotion Strategies

Intermediate Level Electives

INB120	Corporate Systems
INB220	Business Analysis
INB255	Security
INB272	Interaction Design
	Or, an INB300 level unit as approved by the course coordinator

IT Elective List

IT Elective Units

INB123	Project Management Practice
INB221	Technology Management
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
INB313	Electronic Commerce Site Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
INB320	Business Process Modelling
INB321	Business Process Management
INB322	Information Systems Consulting
INB323	Smart Services
INB330	Information Management
INB331	Management Issues for Info Professionals
INB333	Information Programs
INB334	Information Issues and Values
INB335	Information Resources
INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB353	Wireless and Mobile Networks
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles
INB374	Enterprise Software Architecture
INB204	Special Topic 1
INB205	Special Topic 2
INB300	Professional Practice in IT
INB304	Special Topic 3
INB305	Special Topic 4
INS350	CCNA 1&2 Network Fundamentals and Routing
INS352	CCNP1: Building Scalable Internetworks
INS351	CCNA 3&4 Lan Switching
INS353	CCNP 2: Building Multi Layered Switched Networks
INS354	CCNP3: Building Multi Layered Switched Networks
INS355	CCNP 4: Optimising Converged Networks
INB306	Project 1
INB307	Project 2

INB308	Project 3
INB365	Systems Programming
INB355	Cryptology and Protocols
INB860	Computational Intelligence for Control and Embedded Systems
INB346	Enterprise 2.0
INB345	Mobile Devices
INB347	Web 2.0 Applications
INB334	Information Issues and Values

Potential Careers:

Business Analyst, Database Manager, Electronic Commerce Developer, Health Information Manager, Information Officer, Internet Professional, Manager, Programmer, Project Developer, Project Manager, Software Engineer, Systems Analyst, Systems Manager, Systems Programmer, Systems Trainer, Technical Officer, Technology Transfer Officer.

Bachelor of Corporate Systems Management - Dean's Scholars Program (IT06)

Year offered: 2009
Admissions: Yes
Course duration (full-time): 3 years
Domestic fees (indicative): 2009: CSP $3,801 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Assumed knowledge: English (4, SA) and Maths A, B or C (4, SA)
Course coordinator: Dr Taizan Chan
Campus: Gardens Point

Course Overview

The Deanâs Scholars Program is an accelerated honours program allowing completion of the Bachelor of Corporate Systems Management and an honours degree in three years instead of four years. This accelerated program is designed for students with an OP 1 or 2 (or equivalent), who can also demonstrate active involvement in their school and local community activities.

The Bachelor of Corporate Systems Management is an industry-relevant course designed to help you understand the interrelationships between information, technology, business and people. The information professional of the future understands the benefits that cutting-edge technology can deliver. You can add value by helping organisations understand and meet their information challenges.

The course is designed to develop the knowledge and skills you need to understand and communicate business needs, select the right systems and harness these systems to improve business performance for organisations.

Who should apply?

The program is open to applicants currently undertaking Year 12 studies at a secondary school, and who achieve an OP 1 or 2 (or interstate equivalent). Applicants must be outstanding current, or returning from a gap year, Year 12 students who completed their Year 12 education in Australia.

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.

OP Guarantee

The OP Guarantee does not apply to this program.

Deferment

QUT's deferment policy does not apply to this course.

Cooperative Education Program

The School of ITâs 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 youâre 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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Bachelor of Corporate Systems Management

Year 1, Semester 1	
INB103	Industry Insights
INB120	Corporate Systems
INB101	Impact of IT
INB122	Organisational Databases

Year 1, Semester 2	
BSB115	Management
INB123	Project Management Practice
INB124	Information Systems Development
	Block B Unit

Year 2, Semester 1	
INB220	Business Analysis
INB221	Technology Management
MGB223	Entrepreneurship and Innovation
	Block B Unit

Year 2, Semester 2	
INB830	Web Sites For Electronic Commerce
BSB126	Marketing
	Block B Unit
	Block B Unit

Year 2, Summer	
INB325	Corporate Systems Management Project

Year 3, Semester 1	

INB312	Enterprise Systems Applications
INB322	Information Systems Consulting
	Block B Unit
	Block B Unit
	Honours Coursework Elective

Year 3, Semester 2

INN700	Introduction To Research
	Honours Coursework Elective
	Honours Coursework Elective
INN401Â?	Honours Dissertation 1Â?Â?

Year 3, Summer

INN402	Honours Dissertation 2
INN403	Honours Dissertation 3
INN404	Honours Dissertation 4

Block B Elective

Students select unit set(s) from within the Faculty of IT or from those offered by other Faculties at QUT. Alternatively, students may undertake eight elective units with the approval of the Course Coordinator.

Potential Careers:

Business Analyst, Computer Systems Engineer, Database Manager, Information Officer, Internet Professional, Manager, Network Administrator, Network Manager, Project Manager, Systems Analyst, Systems Manager, Systems Programmer, Systems Trainer, Web Designer.

Bachelor of Corporate Systems Management/Bachelor of Information Technology (IT07)

Year offered: 2009
Admissions: Yes
CRICOS code: 063028M
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $4,022 (indicative) per semester
International Fees (per semester): 2009: $10,000 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 416932
Past rank cut-off: 75
Past OP cut-off: 13
OP Guarantee: Yes
Assumed knowledge: English (4,SA), Maths A, B or C (4,SA)
Total credit points: 384
Standard credit points per full-time semester: 48
Course coordinator: Richard Thomas (BIT), Dr Taizan Chan (CSM)
Campus: Gardens Point

Study Areas

IT07 will not have nominated majors and minors and consequently there will not be a Study Area A shown on a graduateâs parchment. Instead, IT07 will have specialisations. The specialisation areas that will be available for students will include:
â¢ Business Process Management
â¢ Data Warehousing
â¢ Digital Societies
â¢ Enterprise Systems
â¢ Information Management
â¢ Network Systems
â¢ Software Engineering
â¢ Web Technologies

Course Description

This degree equips you to build and apply creative, innovative IT solutions across diverse industries. A hands-on, real world based curriculum gives you the opportunity to explore a wide range of areas within the two strands of this degree, and gain deep understanding within your chosen area speciality, such as networking, software engineering, data warehousing, business process modelling, enterprise systems, information management, web technologies, or digital societies. You will experience an innovative, hands-on approach to learning through projects where you develop IT systems. You will be able to gain entrepreneurial skills if you wish to learn how to develop an idea into a commercial opportunity. You learn to harness your creativity and people skills to maximise the impact of your technical know-how in the booming IT marketplace. It positions you for a challenging and rewarding career within the global economy. Full-time students are eligible for the Cooperative Education Program; paid industry work experience with credit towards your degree. Students are also offered many other work-integrated learning opportunities where you receive first-hand industry experience.

Entry Requirements

Year 12 or equivalent
Prerequisites: Nil
Assumed Knowledge: English (4,SA), Maths A, B or C (4,SA)
Primary Fields: B or C
Secondary Fields: B or C
OP Guarantee: Yes

International Students

English language requirements
In addition to the above academic entry requirements, international students must meet the Universityâs English language requirements of IELTS of 6.5 (with no lower than 6.0 for any one band).

Pathways to Futher Studies

In 2001, the Faculty introduced an accelerated Honours program to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year. The program allowed selected high achieving students the opportunity to undertake one postgraduate unit in the final semester of their a BIT degree (or double degree) which would be counted both for completion of the degree and towards the Honours program. The program also provided students with the opportunity to commence their Honours studies over the Summer Semester.

An alternative to the Honours program is the Master of Information Technology (Research). Students who complete a BIT degree (or double degree) with a grade point average equal to, or greater than 5 (7 point scale) and who have decided against enrolling in an Honours program, could undertake this course. In addition, students may wish to enrol in the 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

Cooperative Education Program
The School of ITâs 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 youâre 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.

IT07- Bachelor of Corporate Systems Management/ Bachelor of Information Technology

IT07 Course Outline

Year 1, Semester 1

INB120	Corporate Systems
INB122	Organisational Databases
INB101	Impact of IT
INB102	Emerging Technology

Year 1, Semester 2

INB123	Project Management Practice
BSB115	Management
INB103	Industry Insights
INB104	Building IT Systems

Year 2, Semester 1

INB220	Business Analysis
BSB126	Marketing
	IT Breadth Option
	IT Breadth Option

Year 2, Semester 2

INB124	null
MGB223	Entrepreneurship and Innovation
	IT Breadth Option
	IT Breadth Option

Year 3, Semester 1

INB322	Information Systems Consulting
INB221	Technology Management
INB201	Scalable Systems Development
	Special Option

Year 3, Semester 2

INB300	Professional Practice in IT
INB830	Web Sites For Electronic Commerce
	General Elective
	Special Option

Year 4, Semester 1

INB312	Enterprise Systems Applications
INB325	Corporate Systems Management Project
INB301	The Business of IT
	Special Option

Year 4, Semester 2

INB320	Business Process Modelling
INB330	Information Management
INB302	Capstone Project
	Special Option

IT Breadth Option Unit List

IT Breadth Option Units

You must complete four (4) units from the following list. You should not commence these units until you have completed INB101, INB102, INB103 and INB104.

INB120	Corporate Systems
INB210	Databases
INB220	Business Analysis
INB250	Systems Architecture
INB251	Networks
INB255	Security
INB270	Programming
INB271	The Web
INB272	Interaction Design

IT Specialisation Option Unit List

IT Specialist Option Units

You must complete four (4) 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. The units are grouped in areas to assist you in focusing your studies.

1.	Enterprise Systems:
INB123	Project Management Practice
INB221	Technology Management
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
2.	Web Technologies:
INB313	Electronic Commerce Site Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
3.	Business Process Management:
INB320	Business Process Modelling
INB321	Business Process Management
INB322	Information Systems Consulting
INB323	Smart Services
4.	Information Management:
INB330	Information Management
INB331	Management Issues for Info Professionals
INB332	Information Retrieval
INB333	Information Programs
INB334	Information Issues and Values
INB335	Information Resources
5.	Data Warehousing:
INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining
INB343	Advanced Data Mining and Data Warehousing

6.	Network Systems:
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB353	Wireless and Mobile Networks
7.	Software Engineering:
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles
INB374	Enterprise Software Architecture
8.	Ungrouped:
INB204	Special Topic 1
INB205	Special Topic 2
INB304	Special Topic 3
INB305	Special Topic 4
INB306	Project 1
INB307	Project 2
INB308	Project 3
INB355	Cryptology and Protocols
INB365	Systems Programming
INB860	Computational Intelligence for Control and Embedded Systems
9.	Digital Environments:
INB345	Mobile Devices
INB346	Enterprise 2.0
INB347	Web 2.0 Applications
INB334	Information Issues and Values

Bachelor of Corporate Systems Management/Bachelor of Information Technology (IT08)

Year offered: 2009
Admissions: No
CRICOS code: 063028M
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,785 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
International Entry: February
QTAC code: 416932
Past rank cut-off: 74
Past OP cut-off: 13
Course coordinator: Richard Thomas, Dr Taizan Chan
Campus: Gardens Point

Course discontinued

The Faculty of Science and Technology has discontinued this course and only IT08 continuing students can enrol. Please contact enquiry.scitech@qut.edu.au for any enquiries.

Course overview

In this double degree students complete the requirements for two separate degrees in four years. The course consists of units in both corporate systems management and information technology. In the corporate systems management component students are taught the interrelationship between information, technology, business and people. This component develops the knowledge and skills needed to understand and communicate business needs, select the right systems and integrate these systems to improve business performance. In the information technology component students complete a set of core units integral to all information and technology professionals and then select units in a specialised area of information technology. Full time students can take part in the Cooperative Education Program, offering one year paid industry placement and credit towards their degree (subject to satisfying eligibility requirements).

Cooperative Education Program

The School of ITâs 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 youâre learning in your degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNiTAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the Cooperative Education Program.

Unit Incompatibility/Translation Information

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

Undergraduate Translation Table
If you have completed the unit(s) listed under the âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Further Information

Please contact the Course Co-ordinator Richard Thomas - (07)3138 2782 or enquiry.scitech@qut.edu.au

Bachelor of Corporate Systems Management/ Bachelor of Information Technology

Course Structure 2009 (Continuing Students Only)

This course is discontinued as of 2009 and is only available to continuing students.

Year 1, Semester 1

INB120	Corporate Systems
INB122	Organisational Databases
INB103	Industry Insights
INB250	Systems Architecture

Year 1, Semester 2

INB123	Project Management Practice
BSB115	Management
INB210	Databases
INB104	Building IT Systems

Year 2, Semester 1

INB101	Impact of IT
BSB126	Marketing
INB270	Programming
	Intermediate Level IT Elective

Year 2, Semester 2

INB124	Information Systems Development
MGB223	Entrepreneurship and Innovation
INB251	Networks
INB271	The Web

Year 3, Semester 1

INB312	Enterprise Systems Applications
INB220	Business Analysis
INB221	Technology Management
	IT Elective Unit

Year 3, Semester 2

INB320	Business Process Modelling
	General Elective
	IT Elective Unit
	IT Elective Unit

Year 4, Semester 1

INB322	Information Systems Consulting

INB335	Information Resources
INB301	The Business of IT
	IT Elective Unit

Year 4, Semester 4

EITHER	null
INB302	Capstone Project
OR	null
INB325	Corporate Systems Management Project
AND	The following three units:
	General Elective
	IT Elective Unit
	IT Elective Unit

IT Elective List

IT Elective Units

INB123	Project Management Practice
INB221	Technology Management
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
INB313	Electronic Commerce Site Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
INB320	Business Process Modelling
INB321	Business Process Management
INB322	Information Systems Consulting
INB323	Smart Services
INB330	Information Management
INB331	Management Issues for Info Professionals
INB333	Information Programs
INB334	Information Issues and Values
INB335	Information Resources
INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB353	Wireless and Mobile Networks
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles
INB374	Enterprise Software Architecture
INB204	Special Topic 1
INB205	Special Topic 2
INB300	Professional Practice in IT

INB304	Special Topic 3
INB305	Special Topic 4
INS350	CCNA 1&2 Network Fundamentals and Routing
INS352	CCNP1: Building Scalable Internetworks
INS351	CCNA 3&4 Lan Switching
INS353	CCNP 2: Building Multi Layered Switched Networks
INS354	CCNP3: Building Multi Layered Switched Networks
INS355	CCNP 4: Optimising Converged Networks
INB306	Project 1
INB307	Project 2
INB308	Project 3
INB365	Systems Programming
INB355	Cryptology and Protocols
INB860	Computational Intelligence for Control and Embedded Systems
INB346	Enterprise 2.0
INB345	Mobile Devices
INB347	Web 2.0 Applications
INB334	Information Issues and Values

Bachelor of Corporate Systems Management/Bachelor of Games and Interactive Entertainment (IT09)

Year offered: 2009
Admissions: Yes
CRICOS code: 063029K
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,785 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 416912
Past rank cut-off: 75
Past OP cut-off: 13
Course coordinator: ASPRO Ruth Christie, Taizan Chan
Campus: Gardens Point and Kelvin Grove

Course overview

In this double degree students complete the requirements for two separate degrees in four years. The course consists of units in both corporate systems management and games and interactive entertainment. In the corporate systems management component students are taught the interrelationship between information, technology, business and people. This component develops the knowledge and skills needed to understand and communicate business needs, select the right systems and integrate these systems to improve business performance. In the games and interactive entertainment component students complete core units in the basics of design, games studies, professional skills and programming and then choose a major from the list below. In final year, students participate in a major group project to produce a significant piece of work using PC, mobile devices, consoles or virtual reality. Full time students can take part in the Cooperative Education Program, offering one year paid industry placement and credit towards their degree (subject to satisfying eligibility requirements).

Majors: Animation and computational arts; digital media; game design; and software technologies.

Cooperative Education Program

The School of ITâs 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 youâre learning in your degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNiTAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the Cooperative Education Program.

Futher Information

Please contact the Course Co-ordinator ASPRO Ruth Christie (07)3138 2782 or enquiry.scitech@qut.edu.au

IT09 Course Structure

Year 1, Semester 1

INB120	Corporate Systems
INB103	Industry Insights
INB180	Computer Games Studies
INB204	Special Topic 1

Year 1, Semester 2

BSB115	Management
INB104	Building IT Systems
INB123	Project Management Practice
INB181	Introduction to Games Production

Year 2, Semester 1

INB101	Impact of IT
INB122	Organisational Databases
	Games & Interactive Entertainment Major Unit
	Games & Interactive Entertainment Major Unit

Year 2, Semester 2

INB124	Information Systems Development
INB830	Web Sites For Electronic Commerce
	Games & Interactive Entertainment Major Unit
	Games & Interactive Entertainment Major Unit

Year 3, Semester 1

INB220	Business Analysis
INB221	Technology Management
	Games & Interactive Entertainment Major Unit
	Games & Interactive Entertainment Major Unit

Year 3, Semester 2

MGB223	Entrepreneurship and Innovation
INB301	The Business of IT
	Games & Interactive Entertainment Major Unit
	Games & Interactive Entertainment Major Unit

Year 4, Semester 1

INB379	Game Project Design
INB322	Information Systems Consulting
INB312	Enterprise Systems Applications
INB325	Corporate Systems Management Project
	Or
	IT Elective Unit

Year 4, Semester 2

INB380	Games Project
INB320	Business Process Modelling
	Games & Interactive Entertain Major Unit

Bachelor of Games & Interactive Entertainment Majors

Course structure

Animation

KIB105	Animation and Motion Graphics
KIB108	Animation History and Practices
KIB225	Character Development, Conceptual Design and Animation Layout
KIB203	Introduction to 3D Computer Graphics
KIB325	Real-Time 3D Computer Graphics
KIB316	Virtual Environments
KVB105	Drawing for Design
KVB106	Drawing for Animation

Digital Media

KIB101	Visual Communication
KIB102	Visual Interactions
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
INB345	Mobile Devices
KIB230	Interface and Information Design
KIB309	Embodied Interactions
KIB314	Tangible Media

Game Design

INB281	Advanced Game Design
INB280	Fundamentals of Game Design
INB272	Interaction Design
KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion
KIB214	Design for Interactive Media
AND	Two units selected from the following:
DEB201	Digital Communication
DAB110	Architectural Design 1
DTB101	Interior Design 1
DNB101	Industrial Design 1

Software Technologies*

	* Requirements for this Major is a SA or better in Queensland Maths B (or equivalent)
INB270	Programming
INB210	Databases
INB250	Systems Architecture
INB371	Data Structures and Algorithms
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
INB370	Software Development
MAB281	Mathematics for Computer Graphics
OR	null
INB304	Special Topic 3

University Diploma in Information Technology (IT10)

Year offered: 2009
Admissions: Yes
CRICOS code: 025283M
Course duration (full-time): 2 semesters
International Fees (per semester): 2009: $7,725 (indicative) per semester *(subject to annual review)*
International Entry: February, June and October
Total credit points: 96
Standard credit points per full-time semester: 48
Course coordinator: Elizabeth McDade
Campus: Kelvin Grove

Abbreviation

UnivDipInfTech

Entry requirements - Academic

Successful completion of senior high school with the required grades. Students can find more country specific entry requirements at the following web site. http://www.international.qut.edu.au/apply/howtoapply/entryreqs/academic.jsp

Entry Requirements - English language

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

Description

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

Course Completion

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

Progression

Requirements for progression to the second year of QUT Bachelor of Information Technology:

i) fulfil the Diploma course requirements,
ii) a minimum Grade Point Average (GPA) of 4, and
iii) an IELTS score of 6.5 or its equivalent.

IT10 - University Diploma in InfoTech (Full-time course structure)

Semester One	
ITD001	Problem Solving and Programming
ITD004	Database Systems
ITD005	Systems Architecture
QCD120	Professional Communication 1
	NOTE: ITD004 & ITD005 are offered in ALTERNATE semesters

Semester Two	
IND102	Emerging Technology
IND210	Databases
IND270	Programming
QCD220	Professional Communication 2
	NOTE: IND102 & IND210 are offered in ALTERNATE semesters

Potential Careers:

Academic, Computer Games Developer, Computer Salesperson/Marketer, Computer Systems Engineer, Data Communications Specialist, Database Manager, Digital Composer, Educator, Electronic Commerce Developer, Information Security Specialist, Internet Professional, Multimedia Designer, Network Administrator, Network Manager, Programmer, Public Servant, Secondary School Teacher, Software Engineer, Systems Analyst, Systems Manager, Systems Programmer, Systems Trainer, TAFE Teacher, Teacher, Technical Officer, Trainer, Web Designer.

Bachelor of Information Technology (IT22)

Year offered: 2009
Admissions: No
CRICOS code: 012656E
Course duration (full-time): 3 years
Course duration (part-time): 6 years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
QTAC code: 416801
Past rank cut-off: 74
Past OP cut-off: 13
Assumed knowledge: English (4, SA) and Maths A, B or C (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 288
Course coordinator: Richard Thomas
Campus: Gardens Point

Course 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.

Course Overview

A Bachelor of Information Technology will start you on a challenging and rewarding career path facing the changes brought about by evolving global innovations. You will have the flexibility in your course to complement your skills and knowledge with a cross-section of study areas from other disciplines and faculties.

This course offers you a wide range of options to build your information technology skill set and develop complementary skills from other professional disciplines. You will gain a strong theoretical and practical foundation to advance your career aspirations, choosing from compact and focused specialisations allowing you to hone your skills in an advanced area of information technology and other professions.

Scholarships

If you wish to enrol in the Bachelor of Information Technology, you may like to consider our Dean's Scholars Program for OP1-2 students. If you are a female high school student, you may also apply for our âgo for IT gURLâ merit scholarships.

Find out more about the range of scholarships available.

Cooperative Education Program

The School of ITâs 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 youâre 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.

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.

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances. Find out more on deferment.

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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Further Information

Please contact the Course Co-ordinator Mr Richard Thomas(07)3138 2782 or enquiry.scitech@qut.edu.au

Bachelor of Information Technology

Course Structure

From semester one, 2009 this course will not be available for commencing students. IT22 will only be available for continuing students. New students - please refer to IT23. Please contact enquiry.scitech@qut.edu.au for any enquiries.

The course structure consists of 10 IT Core Studies Units (Block A), 6 Major Units (Block

B) if applicable, and 8 Complementary Studies Area Units (Block C). For those students who choose the Generic No Major option, students replace the major units with any 6 ITBxxx units provided they meet the prerequisites.

Eight (8) Block A units are completed in the first year, while the remaining two (2) Block A units are completed later in the course.

Block C Complementary Studies Area (8 units): Students choose the composition which may include: a second IT Major (6 units) or an approved minor (4 units) and 4 electives or 8 specified electives as approved by the Course Coordinator.

Recommended Core Unit Progression

Year 1, Semester 1

INB104	Building IT Systems
INB103	Industry Insights
INB210	Databases
INB250	Systems Architecture

Year 1, Semester 2

INB270	Programming
INB251	Networks
INB271	The Web

Choose one unit from: Intermediate Level Elective list. This choice will replace ITB008 from 2009 course summary.

Year 2, Semester 1

	Block B or Block C Unit
	Block B or Block C Unit
	Block B or Block C Unit
	Block B or Block C Unit

Year 2, Semester 2

INB301	The Business of IT
	Block B or Block C Unit
	Block B or Block C Unit
	Block B or Block C Unit

Year 3, Semester 1

INB302	Capstone Project
	Block B or Block C Unit
	Block B or Block C Unit
	Block B or Block C Unit

Year 3, Semester 2

	Block B or Block C Unit
	Block B or Block C Unit
	Block B or Block C Unit
	Block B or Block C Unit

No Major Options

Students can choose any 6 INB--- units (subject to prerequisite eligibility) from the Information Technology Undergraduate Elective/Options List as found at the below URL.

http://www.studentservices.qut.edu.au/pdfs/IT_elective_list.pdf

IT Elective List

IT Elective Units

INB123	Project Management Practice
INB221	Technology Management
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
INB313	Electronic Commerce Site Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
INB320	Business Process Modelling
INB321	Business Process Management
INB322	Information Systems Consulting
INB323	Smart Services
INB330	Information Management
INB331	Management Issues for Info Professionals
INB333	Information Programs
INB334	Information Issues and Values
INB335	Information Resources
INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB353	Wireless and Mobile Networks
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles
INB374	Enterprise Software Architecture
INB204	Special Topic 1
INB205	Special Topic 2
INB300	Professional Practice in IT
INB304	Special Topic 3
INB305	Special Topic 4
INS350	CCNA 1&2 Network Fundamentals and Routing
INS352	CCNP1: Building Scalable Internetworks
INS351	CCNA 3&4 Lan Switching
INS353	CCNP 2: Building Multi Layered Switched

	Networks
INS354	CCNP3: Building Multi Layered Switched Networks
INS355	CCNP 4: Optimising Converged Networks
INB306	Project 1
INB307	Project 2
INB308	Project 3
INB365	Systems Programming
INB355	Cryptology and Protocols
INB860	Computational Intelligence for Control and Embedded Systems
INB346	Enterprise 2.0
INB345	Mobile Devices
INB347	Web 2.0 Applications
INB334	Information Issues and Values

Intermediate Level Electives

Intermediate Level Electives	
INB120	Corporate Systems
INB220	Business Analysis
INB255	Security
INB272	Interaction Design
	OR
	an INB300 level unit as approved by the course coordinator

Information Systems Major

Compulsory Units	
INB311	Enterprise Systems
INB340	Database Design
INB220	Business Analysis

IS Elective Units	
INB312	Enterprise Systems Applications
INB342	Enterprise Data Mining
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB320	Business Process Modelling
INB124	Information Systems Development
INB221	Technology Management

Network Systems Major

Compulsory Units	
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB255	Security

Electives	

INB312	Enterprise Systems Applications
INB365	Systems Programming
INB353	Wireless and Mobile Networks
INB355	Cryptology and Protocols

Software Architecture Major

Compulsory Units	
INB340	Database Design
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles

Electives	
	Choose 3 Electives
INB341	Software Development With Oracle
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
INB272	Interaction Design
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB320	Business Process Modelling
INB365	Systems Programming
INB370	Software Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
MAB281	Mathematics for Computer Graphics
	MAB281 is only to be used as a prereq for INB381
	null

Potential Careers:

Business Analyst, Computer Game Programmer, Computer Games Developer, Computer Systems Engineer, Data Communications Specialist, Database Manager, Electronic Commerce Developer, Information Security Specialist, Internet Professional, Multimedia Designer, Network Administrator, Network Manager, Programmer, Project Manager, Software Engineer, Systems Analyst, Systems Manager, Systems Programmer, Web Designer.

Bachelor of Information Technology - Dean's Scholars Program (IT22)

Year offered: 2009
Admissions: No
CRICOS code: 012656E / 017323G
Course duration (full-time): 3 years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
QTAC code: 416002
Past rank cut-off: 96. Also see entry requirements
Past OP cut-off: 3. Also see entry requirements
Assumed knowledge: English (4, SA) and Maths A, B or C (4, SA)
Course coordinator: Richard Thomas
Campus: Gardens Point

Course Overview

The Deanâs Scholars Program is an accelerated honours program allowing completion of the Bachelor of Information Technology and an honours degree in three years instead of four years. This accelerated program is designed for students with an OP 1 or 2 (or equivalent), who can also demonstrate active involvement in their school and local community activities.

The Bachelor of Information Technology gives you a strong theoretical and practical foundation to advance your career aspirations, choosing from compact and focused specialisations allowing you to hone your skills in an advanced area of information technology and other professions.

You will have the flexibility to complement your skills and knowledge in IT with a cross-section of studies from other disciplines.

Who should apply?

The program is open to applicants currently undertaking Year 12 studies at a secondary school, and who achieve an OP 1 or 2 (or interstate equivalent). Applicants must be outstanding current, or returning from a gap year, Year 12 students who completed their Year 12 education in Australia.

Additional Entry Requirements

Information Technology Dean's Scholars applicants are required to complete an online questionnaire which will be available at addentry.qut.com in late August. Shortlisted applicants may be required to attend an interview (in December) and will be notified of date and venue after the questionnaire closes.

The due date to submit the questionnaire is 28 September. Late submissions will be accepted up until 30 November. Submissions after 30 November will not be accepted.

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.

OP Guarantee

The OP Guarantee does not apply to this program.

Fixed Closing Date

Applications for this program will close on **30 November**.

Cooperative Education Program

The School of ITâs 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 youâre 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.

Deferment

QUT's deferment policy does not apply to this course.

International Student Entry

To be eligible to enrol in the Honours program, students must demonstrate appropriate levels of achievement in the Bachelor of Information Technology course.
Offers in the Honours program will be made conditionally on the student maintaining a GPA of 5.5 in the Bachelor of Information Technology component to be eligible to continue to the Bachelor of Information Technology (Honours). It is expected that many DeanÂ¿s Scholars will proceed to PhD studies. However, students have the option of exiting after the Bachelor of Information Technology (2.5yrs).

New Unit Translations/Incompatability Table

Details on the translation and incompatibility of old and new units is located here:
Undergraduate Translation Table and Postgraduate Translation Table
If you have completed the unit(s) listed under the âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Domestic student tuition fee (Dfee) places

Bachelor of Information Technology

Course Structure

Recommended Core Unit Progression

Year 1, Semester 2

INB270	Programming
INB251	Networks
INB271	The Web
	Intermediate Level Elective

Year 2, Semester 1

	Block B or Block C Unit
	Block B or Block C Unit
	Block B or Block C Unit
	Block B or Block C Unit
	Block B or Block C Unit

Year 2, Semester 2

INB301	The Business of IT
	Block B or Block C Unit
	Block B or Block C Unit
	Block B or Block C Unit
	Block B or Block C Unit

Year 2, Summer

| INB302 | Capstone Project |
| | Undertaken over four (4) weeks. |

Year 3, 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
	INN Unit

Year 3, Semester 2

INN700	Introduction To Research
	INN Elective
	INN Elective
INN401	Honours Dissertation 1

Year 3, Summer

| INN402 | Honours Dissertation 2 |

| INN403 | Honours Dissertation 3 |
| INN404 | Honours Dissertation 4 |

Software Architecture Major

Compulsory Units

INB340	Database Design
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles

Electives

	Choose 3 Electives
INB341	Software Development With Oracle
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
INB272	Interaction Design
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB320	Business Process Modelling
INB365	Systems Programming
INB370	Software Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
MAB281	Mathematics for Computer Graphics
	MAB281 is only to be used as a prereq for INB381
	null

Information Systems Major

Compulsory Units

INB311	Enterprise Systems
INB340	Database Design
INB220	Business Analysis

IS Elective Units

INB312	Enterprise Systems Applications
INB342	Enterprise Data Mining
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB320	Business Process Modelling
INB124	Information Systems Development
INB221	Technology Management

Network Systems Major

Compulsory Units

INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment

INB255	Security

Electives	
INB312	Enterprise Systems Applications
INB365	Systems Programming
INB353	Wireless and Mobile Networks
INB355	Cryptology and Protocols

Potential Careers:

Computer Game Programmer, Computer Games Developer, Computer Salesperson/Marketer, Computer Systems Engineer, Data Communications Specialist, Database Manager, Electrical and Computer Engineer, Information Officer, Information Security Specialist, Internet Professional, Manager, Multimedia Designer, Network Administrator, Network Manager, Programmer, Project Manager, Software Engineer, Systems Analyst, Systems Manager, Systems Programmer, Systems Trainer, Web Designer.

Bachelor of Information Technology (IT23)

Year offered: 2009
Admissions: Yes
CRICOS code: 012656E
Course duration (full-time): 3 years
Course duration (part-time): 6 years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February and July
International Entry: February, July and October#
QTAC code: 416801
Past rank cut-off: 75
Past OP cut-off: 13
Assumed knowledge: English (4,SA), Maths A, B or C (4,SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 288
Course coordinator: Richard Thomas
Campus: Gardens Point

Course Description

This degree equips you to build and apply creative, innovative IT solutions across diverse industries. A hands-on, real world based curriculum gives you the opportunity to explore a wide range of areas within IT, and gain deep understanding within your chosen area speciality, such as networking, software engineering, data warehousing, business process modelling, enterprise systems, information management, web technologies, or digital societies. You experience an innovative, hands-on approach to learning through projects where you develop IT systems. You will be able to gain entrepreneurial skills if you wish to learn how to develop an idea into a commercial opportunity. You learn to harness your creativity and people skills to maximise the impact of your technical know-how in the booming IT marketplace. It positions you for a challenging and rewarding career within the global economy. Full-time students are eligible for the Cooperative Education Program; paid industry work experience with credit towards your degree. Students are also offered many other work-integrated learning opportunities where you receive first-hand industry experience.

Study Areas

IT23 will not have nominated majors and minors and consequently there will not be a Study Area A shown on a graduate's parchment. Instead, IT23 will have specialisations. The specialisation areas that will be available for students will include:
â¢ Business Process Management
â¢ Data Warehousing
â¢ Digital Societies
â¢ Enterprise Systems
â¢ Information Management
â¢ Network Systems
â¢ Software Engineering
â¢ Web Technologies

Entry Requirements

Year 12 or equivalent
Prerequisites: Nil
Assumed Knowledge: English (4,SA), Maths A, B or C (4,SA)
Primary Fields: B
Secondary Fields: C
OP Guarantee: Yes

International Students

English language requirements:
In addition to the above academic entry requirements, international students must meet the University's English language requirements of IELTS of 6.5 (with no lower than 6.0 for any one band).
#October entry only for students completing entire degree at QUT (i.e. not eligible for Advanced Standing)

Pathways to Futher Studies

In 2001, the Faculty introduced an accelerated Honours program to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year. The program allowed selected high achieving students the opportunity to undertake one postgraduate unit in the final semester of 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.

Cooperative Education Program

The School of ITâs 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 youâre 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.

IT23 Bachelor of Information Technology Course structure

Year 1, Semester 1

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

Year 1, Semester 2

IT Breadth Option Unit

IT Breadth Option Unit

IT Breadth Option Unit

Complementary Studies Unit

Year 2, Semester 1

INB201 Scalable Systems Development

INB201 can only be taken after you have completed a minimum of 36 credit points of breadth units.

IT Breadth Option Unit

IT Specialisation Option Unit

Complementary Studies Unit

Year 2, Semester 2

IT Specialisation Option Unit

Complementary Studies Unit

Complementary Studies Unit

Complementary Studies Unit

Year 3, Semester 1

INB300	Professional Practice in IT
INB301	The Business of IT

INB300 and INB301 can only be taken after you have completed a minimum of 192 credit points of study.

IT Specialisation Option Unit

Complementary Studies Unit

Year 3, Semester 2

INB302 Capstone Project

INB301 must be completed before enrolling in INB302.

IT Specialisation Option Unit

Complementary Studies Unit

Complementary Studies Unit

IT Breadth Option Unit List

IT Breadth Option Units

You must complete four (4) units from the following list. You should not commence these units until you have completed INB101, INB102, INB103 and INB104.

INB120	Corporate Systems
INB210	Databases
INB220	Business Analysis
INB250	Systems Architecture
INB251	Networks
INB255	Security
INB270	Programming
INB271	The Web
INB272	Interaction Design

IT Specialisation Option Unit List

IT Specialist Option Units

You must complete four (4) 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. The units are grouped in areas to assist you in focusing your studies.

1.	Enterprise Systems:
INB123	Project Management Practice
INB221	Technology Management
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
2.	Web Technologies:
INB313	Electronic Commerce Site Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
3.	Business Process Management:
INB320	Business Process Modelling

INB321	Business Process Management
INB322	Information Systems Consulting
INB323	Smart Services
4.	Information Management:
INB330	Information Management
INB331	Management Issues for Info Professionals
INB332	Information Retrieval
INB333	Information Programs
INB334	Information Issues and Values
INB335	Information Resources
5.	Data Warehousing:
INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining
INB343	Advanced Data Mining and Data Warehousing
6.	Network Systems:
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB353	Wireless and Mobile Networks
7.	Software Engineering:
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles
INB374	Enterprise Software Architecture
8.	Ungrouped:
INB204	Special Topic 1
INB205	Special Topic 2
INB304	Special Topic 3
INB305	Special Topic 4
INB306	Project 1
INB307	Project 2
INB308	Project 3
INB355	Cryptology and Protocols
INB365	Systems Programming
INB860	Computational Intelligence for Control and Embedded Systems
9.	Digital Environments:
INB345	Mobile Devices
INB346	Enterprise 2.0
INB347	Web 2.0 Applications
INB334	Information Issues and Values

IT - Complementary Study Unit List

Complementary Study Units: A maximum of 96 credit points can be chosen from:

1. The list of Breadth and Specialisation units.
2. Other Information Technology units. Except INS010, INS011 or INS012. (IT23 Cooperative education students will enrol in INB300 and INB302).
3. Students can also choose from the range of CISCO units including INS350, INS351, INS352, INS353, INS354 and INS355. Please see the Course Summary Sheet for more information
4. Undergraduate units available with other QUT faculties.

IT Elective Units List

IT Elective Units	
INB123	Project Management Practice
INB124	Information Systems Development
INB181	Introduction to Games Production
INB204	Special Topic 1
INB205	Special Topic 2
INB220	Business Analysis
INB221	Technology Management
INB255	Security
INB272	Interaction Design
INB280	Fundamentals of Game Design
INB281	Advanced Game Design
INB300	Professional Practice in IT
INB304	Special Topic 3
INB305	Special Topic 4
INB306	Project 1
INB307	Project 2
INB308	Project 3
INB309-1	Major Project
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
INB313	Electronic Commerce Site Development
INB320	Business Process Modelling
INB321	Business Process Management
INB322	Information Systems Consulting
INB323	Smart Services
INB330	Information Management
INB331	Management Issues for Info Professionals
INB332	Information Retrieval
INB334	Information Issues and Values
INB335	Information Resources
INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining
INB343	Advanced Data Mining and Data Warehousing
INB345	Mobile Devices
INB346	Enterprise 2.0
INB347	Web 2.0 Applications

INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB353	Wireless and Mobile Networks
INB355	Cryptology and Protocols
INB365	Systems Programming
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
INB860	Computational Intelligence for Control and Embedded Systems
MAB281	Mathematics for Computer Graphics
INS350	CCNA 1&2 Network Fundamentals and Routing
INS351	CCNA 3&4 Lan Switching
INS352	CCNP1: Building Scalable Internetworks
INS353	CCNP 2: Implementing Secure Converged Networks
INS354	CCNP 3: Building Multi Layered Switched Networks
INS355	CCNP 4: Optimising Converged Networks

Bachelor of Information Technology (Honours) (IT28)

Year offered: 2009
Admissions: Yes
CRICOS code: 017323G
Course duration (full-time): 1 year
Course duration (part-time): 2 years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February and July
International Entry: February and July
Total credit points: 96
Course coordinator: Associate Professor Shlomo Geva
Campus: Gardens Point

Course 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.

Entry Requirements

A Bachelor of Information Technology 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.

The 'Accelerated' Honours Program

The 'Accelerated Honours' program has been structured to provide an incentive for high achieving Bachelor of Information Technology students to continue into the Faculty's Honours Program. See course entry IT29 for further information.

Notes

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.

Further Information

For further information contact the course coordinator Shlomo Geva on enquiry.scitech@qut.edu.au or visit http://www.scitech.qut.edu.au/research

IT28 - Bachelor of Information Technology (Honours)

FULL TIME

Year 1, Semester 1

INN700	Introduction To Research
INN401	Honours Dissertation 1
	Elective
	Elective

Year 1, Semester 2

INN402	Honours Dissertation 2
INN403	Honours Dissertation 3
INN404	Honours Dissertation 4
	Elective

PART TIME

Year 1, Semester 1

INN700	Introduction To Research
INN401	Honours Dissertation 1

Year 1, Semester 2	
INN402	Honours Dissertation 2
	Elective

Year 2, Semester 1	
INN403	Honours Dissertation 3
	Elective

Year 2, Semester 2	
INN404	null
	Elective
	null

Elective Units - Students should choose advanced level postgraduate units. Normally units are undertaken in the area of the student's undergraduate major. Students wishing to enrol in a unit that is not of an advanced level should contact the Course Coordinator.

Full-time students should be aware that many electives may be offered evenings only.

IT Honours Elective Units

Elective units

The following electives are only suggestions:

Approved Honours Electives	
INN312	Enterprise Systems Applications
INN342	Enterprise Data Mining and Data Analysis
INN272	Interaction Design
INN385	Multimedia Systems
INN313	Electronic Commerce Site Development
INN322	Information Systems Consulting
INN500	IT Project Management
INN321	Business Process Management
INN370	Software Development
INN373	Web Application Development
INN374	Enterprise Software Architecture
INN352	Network Planning
INN353	Wireless and Mobile Networks
INN381	Modelling and Animation Techniques
INN181	Introduction to Games Production

Advanced Honours Electives	
INN610	Case Studies in Enterprise Systems
INN386	Advanced Multimedia Systems
INN255	Security
INN355	Cryptology and Protocols
INN382	Real Time Rendering Techniques
INN652	Advanced Cryptology
INN570	Internationalisation of Software
INN650	Advanced Network Management

INN370	Software Development

Potential Careers:

Computer Games Developer, Data Communications Specialist, Database Manager, Electronic Commerce Developer, Internet Professional, Journalist, Network Administrator, Network Manager, Programmer, Software Engineer, Systems Analyst, Systems Manager, Systems Programmer, Web Designer.

Bachelor of Information Technology (Honours) - Accelerated Program (IT29)

Year offered: 2009
Admissions: Yes
CRICOS code: 017323G
Course duration (full-time): 2 semesters
Domestic fees (indicative): 2009: CSP $3,700 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February and July
International Entry: February and July
Total credit points: 96
Course coordinator: Associate Professor Shlomo Geva
Campus: Gardens Point

Course 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.

Notes

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.

Futher Information

Please contact the Course Co-ordinator, Dr Shlomo Geva (07)3138 2782 or enquiry.scitech@qut.edu.au

IT29 - Bachelor of Information Technology (Honours) - Accelerated Program

Year 3, Semester 1*	
	Elective

Year 3, Semester 2	
INN700	Introduction To Research
INN401	Honours Dissertation 1
	Elective
	Elective

Year 3, Semester 3	
INN402	Honours Dissertation 2
INN403	Honours Dissertation 3
INN404	Honours Dissertation 4
	null

* The first semester of the Accelerated Honours Program occurs in the final semester of an undergraduate IT course (48 credit points remaining). This involves a concurrent enrolment with the undergraduate course (36 credit points enrolment) and 12 credit points Honours elective undertaken within the IT29 course.

Please note: tuition fees normally apply for

Summer enrolment. Deans Scholars should contact their IT Course Coordinator for further details.

Elective Units - Students should choose from the list of advanced level postgraduate units. Normally units are undertaken in the area of the student's undergraduate major. Students wishing to enrol in a unit other than those listed should contact the Course Coordinator. Students should note that many electives might be offered in the evenings only.

MID YEAR ENTRY

Year 3, Semester 2*

Elective

Year 3, Semester 3

INN700	Introduction To Research
INN401	Honours Dissertation 1
INN402	Honours Dissertation 2

Year 4, Semester 1

INN403	Honours Dissertation 3
INN404	Honours Dissertation 4
	Elective
	Elective
	null

* The first semester of the Accelerated Honours Program occurs in the final semester of an undergraduate IT course (48 credit points remaining). This involves a concurrent enrolment with the undergraduate course (36 credit points enrolment) and 12 credit points Honours elective undertaken within the IT29 course.

Elective Units - Students should choose advanced level postgraduate units. Normally units are undertaken in the area of the student's undergraduate major. Students wishing to enrol in a unit that is not of an advanced level should contact the Course Coordinator. Students should note that many electives might be offered in the evenings only.

Please note: tuition fees normally apply for Summer enrolment.

IT Honours Elective Units

Elective units

The following electives are only suggestions:

Approved Honours Electives

INN312	Enterprise Systems Applications
INN342	Enterprise Data Mining and Data Analysis
INN272	Interaction Design
INN385	Multimedia Systems
INN313	Electronic Commerce Site Development
INN322	Information Systems Consulting
INN500	IT Project Management

INN321	Business Process Management
INN370	Software Development
INN373	Web Application Development
INN374	Enterprise Software Architecture
INN352	Network Planning
INN353	Wireless and Mobile Networks
INN381	Modelling and Animation Techniques
INN181	Introduction to Games Production

Advanced Honours Electives

INN610	Case Studies in Enterprise Systems
INN386	Advanced Multimedia Systems
INN255	Security
INN355	Cryptology and Protocols
INN382	Real Time Rendering Techniques
INN652	Advanced Cryptology
INN570	Internationalisation of Software
INN650	Advanced Network Management
INN370	Software Development

Potential Careers:

Academic, Business Analyst, Computer Games Developer, Computer Salesperson/Marketer, Computer Systems Engineer, Data Communications Specialist, Database Manager, Electrical and Computer Engineer, Information Officer, Information Security Specialist, Internet Professional, Multimedia Designer, Network Administrator, Network Manager, Systems Analyst, Systems Manager, Systems Programmer, Systems Trainer.

Graduate Diploma in Information Technology (IT Graduates) (IT35)

Year offered: 2009
Admissions: No
CRICOS code: 018771J
Course duration (full-time): 1 years
Course duration (part-time): 2 years
Domestic fees (indicative): 2009: $7,000 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Total credit points: 96
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Course Overview

This program is designed for information technology graduates who wish to update and upgrade their knowledge and skills for purposes of further career development. The course assists IT graduates to acquire specialised knowledge in an area of information technology and/or widen their knowledge into new areas of information technology.

Course is under review

From semester one, 2009 this course will not be available for commencing students. IT35 will only be available for continuing students. New students - please refer to IT43. Please contact enquiry.scitech@qut.edu.au for any enquiries

Entry Requirements

Applicants for either IT35 or IT40 must have:
a) a bachelors degree in Information Technology with a grade point average of at least 4.5 (7-point scale)
OR
b) provide other evidence of such qualifications and significant full-time IT work experience, as will satisfy the Dean of Faculty that the applicant possesses the capacity to pursue the course of study

Applicants who wish to gain entry into this course, based on IT work experience, are encouraged to complete a Graduate Equivalency Proforma .

Course Structure

Students who commenced Semester 2, 2006 or later

To graduate from the Master of Information Technology, students are required to complete 12 units, consisting of:

â¢ 1 x Compulsory Unit â INN500 IT Project Management
â¢ A minimum of 6 x Advanced Level 1 Units (including INN500)
â¢ A minimum of 1 x Advanced Level 2 Units
â¢ A maximum of 3 x Postgraduate level Elective Units selected from outside the Faculty, in consultation with the Course Coordinator

To exit the Masters course with a Graduate Diploma in Information Technology, students are required to complete

8 units, consisting of:

â¢ 1 x Compulsory Unit â INN500 IT Project Management
â¢ A minimum of 5 x Advanced Level 1 Units (including INN500)
â¢ A minimum of 1 x Advanced Level 2 Units

Students who commenced Semester 1, 2004 and prior to Semester 2, 2006

To graduate from the Master of Information Technology, students are required to complete 12 units, consisting of:

â¢ A minimum of 6 x Advanced Level 1 Units
â¢ A minimum of 1 x Advanced Level 2 Units

To exit the Masters course with a Graduate Diploma in Information Technology, students are required to have completed 8 units, consisting of:

â¢ A minimum of 5 x Advanced Level 1 Units
â¢ A minimum of 1 x Advanced Level 2 Units

Articulation

Moving Between Courses

Domestic Students currently enrolled in the Graduate Diploma in Information Technology (IT35) or the Graduate Certificate (IT89, IT90, IT92, IT93, IT94, IT95, IT96, IT98, IT99), are in nested program courses. Upon successful completion of your course, domestic students will be invited to continue with the next stage of the program in the following teaching period. An email will be sent you student email account inviting you continue. If you accept the option to articulate immediately, you will not be required to complete an application for academic credit as units and grades achieved in the lower award will be transferred to the new course.

Students in the Masters course (IT40) wishing to exit with the Graduate Diploma (IT35) are required to submit an Application to Graduate Early with an Approved Exit Course (SRX) Form. These forms must be submitted by Week 13 in the semester you expect to meet the requirements for either the Graduate Diploma or Graduate Certificate.

International students wishing to change courses should consult International Student Business Services.

Further Information

Further Information
For further information contact the course coordinator Dr Ernest Foo on enquiry.scitech@qut.edu.au or call 07 3138 2782

Unit Incompatibility/Translation Information

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

Postgraduate Translation Table
If you have completed the unit(s) listed under the âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Potential Careers:

Business Analyst, Data Communications Specialist, Database Manager, Electronic Commerce Developer, Multimedia Designer, Network Administrator, Network Manager, Programmer, Software Engineer, Systems Analyst, Systems Manager, Systems Programmer.

Graduate Diploma In Information Technology (IT37)

Year offered: 2009
Admissions: Yes
Course duration (full-time): 1 year
Course duration (part-time): 2 years
International Fees (per semester): 2009: $11,750 (indicative) per semester *(subject to annual review)*
Total credit points: 96
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Course Overview

Information technology is now firmly ensconced in society with all the other business practices that constitute modern organisations. This Graduate Diploma course has interfaculty contributions from the Faculties of IT, 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:

â¢ No Major
â¢ Software Architecture
â¢ Network Management
â¢ Enterprise Systems
â¢ Games Production
â¢ Games Design
â¢ Security
â¢ Library and Information Science
â¢ Information Management
â¢ Digital Environments
â¢ Executive Information Practice

The Graduate Diploma in Information Technology IT37 is an exit only option. However it is nested within the Master of Information Technology IT43 and Master of Information Technology Advanced IT44 courses. Students who complete the Graduate Diploma may return to complete the Masters at a later date and claim credit for all units completed in the Graduate Diploma.

The Graduate Diploma does not provide a pathway to follow on with a research degree (Research Masters, Professional Doctorate or PhD).

Entry Requirements

The Graduate Diploma in Information Technology IT37 is an exit only option. Students must have been enrolled in the Master of Information Technology IT43 or Master of Information Technology IT44 and opted to exit with 96 credit points.

Course Structure

Students are required to complete 96 credit points of units. All students are required to complete the specified core unit in IT Project Management. This course may be taken over two semesters full-time or four semesters part-time.

Further Information

For further information contact the course coordinator Ernest Foo on enquiry.scitech@qut.edu.au or call 07 3138 2782

IT37 - Graduate Diploma In Information Technology

Core	
INN500	IT Project Management

Major Study Areas	
	Students choose one of the following majors (see Major option list):
	No Major
	Software Architecture
	Network Management
	Enterprise Systems
	Games Production
	Games Design
	Security
	Executive Information Practice
	Library and Information Science
	Information Management
	Digital Environments

IT37 - Major Options

A Major block has 84 credit points plus a 48 credit point Elective block

Information Technology	
DO	*Any IT postgraduate units not in the "Basic Unit List", such that at least one unit is of the form: INN5xx, INN6xx or INN7xx and the total unit set equals 84 credit points

Software Architecture	
DO	*All of these units:
INN371	Data Structures and Algorithms
INN372	Agile Software Development
INN374	Enterprise Software Architecture
INN570	Internationalisation of Software
PLUS	*Units to 36 credit points from:
INN700	Introduction To Research
INN271	The Web
INN313	Electronic Commerce Site Development
INN373	Web Application Development
INN365	Systems Programming
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3
INN605	Advanced Research 1

INN606	Advanced Research 2
INN607	Advanced Research 3

Network Management

DO	*All of these units:
INN350	Internet Protocols and Services
INN351	Unix Network Administration
INN352	Network Planning
INN650	Advanced Network Management
PLUS	*Units to 36 credit points from:
INN700	Introduction To Research
INN353	Wireless and Mobile Networks
INN255	Security
INN651	Security Technologies
INN355	Cryptology and Protocols
INN652	Advanced Cryptology
INN550	Computer Forensics
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3
INN605	Advanced Research 1
INN606	Advanced Research 2
INN607	Advanced Research 3
INS450	CCNA 1 and 2 Network Fundamentals and Routing
INS451	CCNA 3 and 4 Lan Switching
INS452	CCNP1: Building Scalable Internetworks
INS453	CCNP 2: Building Multi Layered Switched Networks
INS454	CCNP3: Building Multi Layered Switched Networks
INS455	CCNP4: Optimising Converged Networks

Enterprise Systems

DO	*All of these units:
INN311	Enterprise Systems
INN312	Enterprise Systems Applications
INN374	Enterprise Software Architecture
INN610	Case Studies in Enterprise Systems
PLUS	*Units to 36 credit points from:
INN700	Introduction To Research
INN340	Database Design
INN342	Enterprise Data Mining and Data Analysis
INN341	Software Development With Oracle
INN321	Business Process Management
INN220	Business Analysis
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3

INN605	Advanced Research 1
INN606	Advanced Research 2
INN607	Advanced Research 3

Games Production

DO	*All of these units:
INN180	Computer Games Studies
INN181	Introduction to Games Production
INN600	Advanced Readings 1
INN601	Advanced Readings 2
PLUS	*Units to 36 credit points from:
INN220	Business Analysis
INN321	Business Process Management
INN330	Information Management
INN311	Enterprise Systems
INN700	Introduction To Research

Games Design

DO	*All of these units:
INN180	Computer Games Studies
INN280	Fundamentals of Game Design
INN281	Advanced Game Design
INN272	Interaction Design
PLUS	*Units to 36 credit points from:
INN181	Introduction to Games Production
INN385	Multimedia Systems
INN386	Advanced Multimedia Systems
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN700	Introduction To Research
KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion

Security

DO	*All of these units:
INN255	Security
INN651	Security Technologies
PLUS	*Units to 60 credit points from:
INN700	Introduction To Research
INN355	Cryptology and Protocols
INN652	Advanced Cryptology
INN550	Computer Forensics
MGN524	Special Topic in Management 1
AYN410	Business Law and Ethics
MGN433	Managing High-Performance Organisations
MGN423	Contemporary Strategic Analysis
GSN440	Risk Management 1
JSN106	Analytical Methods of Intelligence

JSN114	Cybercrime
MAN778	Applications of Discrete Mathematics
LWN139	Privacy Law
LWN125	Electronic Commerce Law
INN690	Minor Project 1
INN691	Minor Project 2
INN692	Minor Project 3
INN693	Project
INN694-1	Project 1
INN694-2	Project
INN695	Major Project
INN696-1	Major Project 1
INN696-2	Major Project 2
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3
INN605	Advanced Research 1
INN606	Advanced Research 2
INN607	Advanced Research 3

Library and Information Science

DO	Units to 84 credit points:
INN332	Information Retrieval
INN531	Information Services
INN533	Information Organisation
INN333	Information Programs
INN530	Web Content Reliability
INN532	Information Literacy Education
INN632-1	Professional Practice
INN632-2	Professional Practice
INN632-3	Professional Practice
INN632-4	Professional Practice
INN632-5	Professional Practice
INN632-6	Professional Practice
INN330	Information Management
INN331	Management Issues for Information Professionals

Information Management

DO	*All of these units:
INN330	Information Management
SPN637	Managing Knowledge in Learning Organisations
INN122	Organisational Databases
INN255	Security
INN335	Information Resources
INN220	Business Analysis
PLUS	*One of these units:
INN700	Introduction To Research

INN334	Information Issues and Values
INN540	User Experience

Executive Information Practice

DO	*All of these units:
INN630	Evidence Based Practice
INN631	Executive Coaching
INN690	Minor Project 1
INN334	Information Issues and Values
PLUS	*Six of these units:
GSN401	Managing in the Global Business Environment
GSN403	Understanding Data
GSN404	Financial Statements Analysis
GSN405	Strategic Management
GSN406	Human Resource Management Issues
GSN407	Business Communication
GSN408	Fundamentals of Marketing Management
GSN409	Organisational Behaviour 1
GSN410	Entrepreneurship
GSN412	Business Law 1
GSN413	Financial Management 1
GSN415	Understanding Leadership
GSN491	Economics in Business 1

Digital Environments

DO	*All of these units:
INN345	Mobile Devices
INN346	Enterprise 2.0
INN347	Web 2.0 Applications
INN540	User Experience
INN690	Minor Project 1
KCP402	New Media Studies
PLUS	*IT postgraduate units to 12 credit points, not in the "Basic Unit List".

Basic Unit List

INN101	Impact of IT
INN120	Corporate Systems
INN122	Organisational Databases
INN124	Information Systems Development
INN210	Databases
INN220	Business Analysis
INN221	Technology Management
INN251	Networks
INN255	Security
INN270	Programming
INN271	The Web

Graduate Diploma in Information Technology (Non-IT Graduates) (IT38)

Year offered: 2009
Admissions: No
CRICOS code: 018771J
Course duration (full-time): 2 semesters
Course duration (part-time): 4 semesters
Domestic fees (indicative): 2009: $6,750 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February, July and November
International Entry: February, July and November
Total credit points: 96
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Course update

From 2009 this course will no longer be offered for commencing students and will only be available to continuing students.
Commencing students please refer to IT43. Please contact enquiry.scitech@qut.edu.au for any enquiries or call 3138 2782.

Course Overview

This program is designed for non-IT graduates who wish to broaden career opportunities by gaining a postgraduate IT qualification. The programs allow students to specialise in a wide range of areas including software engineering, data communications and information systems.

These programs aim to build on non-IT skills acquired in previous study, such as critical and analytical skills; as well as provide an IT curriculum with depth and breadth, from introductory to advanced level.

Students are encouraged to focus on those parts of the employment spectrum where cross-disciplinary qualifications are most appreciated.

Entry Requirements

Please note that this information is for continuing students only. Commencing students please refer to IT43 Master of Information Technology

Students can elect to be admitted to either the Graduate Diploma in Information Technology (IT38) or the Master of Information Technology (IT45).

Applicants for either IT38 or IT45 must have: a Bachelors degree in a discipline other than Information Technology with a grade point average of at least 4.5 (7 point scale); and have demonstrated competence with the basic skills and concepts of personal or office usage such as desktop applications, email, Internet.

Applicants are assumed to have possessed the following prerequisite skills:
Â-- Can use and manage email facilities;
Â-- Can create and manage a personal file system (eg. home or office computer);
- Understand how to locate and use resources on the internet;
- Familiar with the typical desktop environment: word processors, spreadsheets, etc.;
- Aware of personal computing security issues with regard to backups, viruses, password protection.

These basic skills will not be taught in class. QUT-wide resources are made available for individuals to improve their computer literacy levels.

Applicants may refer to an online Computer Literacy Self-Assessment Questionnaire for more information.

Course Structure

To graduate with a Graduate Diploma in Information Technology (IT38), students are required to have completed 8 units, including:
1 x Compulsory Unit - INN500 IT Project Management
A Minimum of 3 x Basic Level Units
4 x Chosen from Intermediate or Advanced Level 1 Units

Articulation

Students who complete IT38 can subsequently seek admission to IT45 and are only required to undertake an additional four units to meet the requirements for the Masters degree.

Further Information

For further information contact the course coordinator Dr Ernest Foo on enquiry.scitech@qut.edu.au or call 07 3138 2782

Potential Careers:

Business Analyst, Data Communications Specialist, Database Manager, Electronic Commerce Developer, Internet Professional, Multimedia Designer, Network Administrator, Network Manager, Programmer, Software Engineer, Systems Analyst, Systems Manager, Systems Programmer.

Master of Information Technology (IT Graduates) (IT40)

Year offered: 2009
Admissions: No
CRICOS code: 003776E
Course duration (full-time): 3 semesters
Course duration (part-time): 6 semesters
Domestic fees (indicative): 2009: $7,000 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Total credit points: 144
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Course Overview

The Master of Information Technology â with associated nested graduate diploma and graduate certificates â can be tailored for information technology graduates who wish to revise, update or extend their IT skills and knowledge.

Students may take the Master of Information Technology as a broad-based qualification or choose to specialise in a particular area such as networks, security, enterprise systems, software development, IT management or games development.

With multiple specialisations now emerging in IT, applicants with existing IT qualifications may wish to study advanced units in their own specialisation, and/or move into an entirely different study of IT.

IT graduates who are unsure about enrolling in a full Masters program may like to enrol in a Graduate Certificate or Graduate Diploma which can then be used to articulate into the Master of Information Technology (IT40).

Course Update

From semester one, 2009 this course will not be available for commencing students. IT40 will only be available for continuing students. New students - please refer to IT43. Please contact enquiry.scitech@qut.edu.au for any enquiries.

Entry Requirements

A bachelor degree majoring in information technology with a grade point average of at least 4.5 (on a 7-point scale) **OR** evidence of work experience and/or training equivalent to an IT major.

Course Structure

Students who commenced Semester 2, 2006 or later

To graduate from the Master of Information Technology, students are required to complete 12 units, consisting of:

â¢ 1 x Compulsory Unit â INN500 IT Project Management
â¢ A minimum of 6 x Advanced Level 1 Units (including INN500)
â¢ A minimum of 1 x Advanced Level 2 Units
â¢ A maximum of 3 x Postgraduate level Elective Units

selected from outside the Faculty, in consultation with the Course Coordinator

To exit the Masters course with a Graduate Diploma in Information Technology, students are required to complete 8 units, consisting of:

â¢ 1 x Compulsory Unit â INN500 IT Project Management
â¢ A minimum of 5 x Advanced Level 1 Units (including INN500)
â¢ A minimum of 1 x Advanced Level 2 Units

Students who commenced Semester 1, 2004 and prior to Semester 2, 2006

To graduate from the Master of Information Technology, students are required to complete 12 units, consisting of:

â¢ A minimum of 6 x Advanced Level 1 Units
â¢ A minimum of 1 x Advanced Level 2 Units

To exit the Masters course with a Graduate Diploma in Information Technology, students are required to have completed 8 units, consisting of:

â¢ A minimum of 5 x Advanced Level 1 Units
â¢ A minimum of 1 x Advanced Level 2 Units

Unit Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:
Postgraduate Translation Table
If you have completed the unit(s) listed under the âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Contact Details

For further information, please contact Dr Ernest Foo on 3138 2782 or enquiry.scitech@qut.edu.au

Potential Careers:

Business Analyst, Data Communications Specialist, Database Manager, Electronic Commerce Developer, Internet Professional, Multimedia Designer, Network Administrator, Network Manager, Programmer, Software Engineer, Systems Analyst, Systems Manager, Systems Programmer.

Master of Information Technology (IT43)

Year offered: 2009
Admissions: Yes
CRICOS code: 003776E
Course duration (full-time): 1.5 years
Course duration (part-time): 3 years
Domestic fees (indicative): 2009: $6,750 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February and July (LIS part-time only in July)
International Entry: February and July (LIS part-time only in July)
Total credit points: 144
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Course Overview

Information technology is now firmly ensconced in society with all the other business practices that constitute modern organisations. This Master of Information Technology course has interfaculty contributions from the Faculties of Science and Technology, Business, Creative Industries and Law, matching closely to their relevant IT research areas. Recognition of the burgeoning of specialised areas within the Information Industries is reflected in the structure of this course through ten different majors other than the "No Major" option:
â¢ Software Architecture
â¢ Network Management
â¢ Enterprise Systems
â¢ Games Production
â¢ Games Design
â¢ Security
â¢ Library and Information Science (Multi-modal)
â¢ Information Management
â¢ Digital Environments
â¢ Executive Information Practice

The structure of this course is designed so that a student does not have to decide on a major until after the first semester. Elective and core units may be selected first. Students must generally complete the core unit and seven units from within their major. The only exception to this structure is in the Library and Information Science major.

Students who complete the Master of Information Technology (IT43) may return to complete the Master of Information Technology (Advanced) (IT44) at a later date and claim credit for all units completed in IT43.

Electives:
Students can generally select up to 4 electives; again, the exception is in the Library and Information Science major, where students can select no more than two electives.

Non-cognate students are recommended to select three Basic Elective Units as their electives.

Students wishing to use the Masters program as a pathway to a PhD program within QUT are recommended to select 4 advanced research or project units as their electives. These students are also advised to enrol in INN700 Introduction to Research as part of their major.

It is possible, for students who wish, to complete dual Master degrees. Students can receive up to four units of credit for a previous Masters degree as part of their elective unit block. Thus, they are only required to complete the major and core. Students may then receive their Masters degree from the Faculty of Science and Technology in two semesters.

Students undertaking units from the MBA program (GSN units) in the Brisbane Graduate School of Business (BGSB) must meet the MBA entry requirements. Please see the B G S B w e b s i t e http://www.bgsb.qut.edu.au/study/mba/mbacourses/ for further information.

The Library and Information Science major is offered in multimodal delivery allowing students to complete their studies either face to face or online.

Entry requirements

To be eligible for this Masters Coursework program, students must meet one of the following criteria:

â¢ Australian equivalent of a bachelorâs degree in any discipline with a grade point average of at least 4.5 (on a 7-point scale)

OR

â¢ 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.

Domestic students:
Domestic students who have completed an undergraduate degree (in any field) with a minimum grade point average (GPA) of at least 4.5 (on a 7-point scale) are eligible for the programs described in this proposal.

Applicants without an undergraduate degree in Information Technology (or equivalent) are recommended to select 3 Basic Elective Units as their electives. These electives are to be taken at the beginning of their studies.

International Students:
International students must complete the above requirements and also achieve an IELTS overall band score of 6.5 or more with no sub-band below 6.0.

International students with an IELTS overall band score between 6.0 and 6.5 with no sub-band below 5.0 are permitted to complete communication units offered by QUT International College as elective units within their Masters degree. These units must be successfully completed in the first semester of the Masters program.

Applicants without an undergraduate degree in Information Technology (or equivalent) are recommended to select 3 Basic Elective Units as their electives. These electives are to be taken at the beginning of their studies.

Special Entry Requirements

Library and Information Science:

- a bachelor degree in any discipline other than library and information science with a grade point average of at least 4.5 (On a 7 points scale).

Executive information practice:

- has core units from the MBA and as such must also meet the MBA entry requirements:
o Demonstrate competency in the English language
o Have a GMAT score of at least 500
o Have at least three years work experience
o At least 10 points from at least two of the three categories - prior work experience, academic achievement and management aptitude
o For further information, including details regarding the allocation of points, please see the table at: http://www.bgsb.qut.edu.au/study/future/entryreq.jsp

Online Delivery

The Library and Information Science major is offered in multimodal delivery allowing students to complete their studies either face to face or online.

Course completion rules

Students should meet the following requirements before they are able to complete the Masters program:
â¢ Students are required to complete 144 credit points of units.
â¢ Students are required to complete the specified core unit.
â¢ Students wishing to specialise must complete the specific unit requirements for a major.
â¢ Students wishing to complete their postgraduate studies without a single area of specialisation must satisfy the unit requirements for graduation with no major.
â¢ Students may be allowed to take up to four units of electives. These units may be selected from postgraduate units outside of the Faculty of Science and Technology.

Early exit options

Students enrolled in this course may be eligible to exit their courses with a Graduate Certificate (IT85), after successful completion of an approved 48 credit points, or with a Graduate Diploma (IT37), after successful completion of an approved 96 credit points

Further Information

For further information on this course please contact the course coordinator Dr Ernest Foo on 3138 2782 or email enquiry.scitech@qut.edu.au

IT43 - Master of Information Technology

Core	
INN500	IT Project Management

Major Study Areas	

Students choose one of the following majors (see Major option list):

No Major

Software Architecture

Network Management

Enterprise Systems

Games Production

Games Design

Security

Executive Information Practice

Library and Information Science

Information Management

Digital Environments

Special Entry Requirements	

Library and Information Science:

A bachelor degree in any discipline other than library and information science with a grade point average of at least 4.5 (On a 7 points scale).

Executive information practice:

Has core units from the MBA and as such must also meet the MBA entry requirements:

- Demonstrate competency in the English language

- Have a GMAT score of at least 500

- Have at least three years work experience

- At least 10 points from at least two of the three categories - prior work experience, academic achievement and management aptitude

- For further information, including details regarding the allocation of points, please see the table at: http://www.bgsb.qut.edu.au/study/future/entryreq.jsp

Basic Unit List

INN101	Impact of IT
INN120	Corporate Systems
INN122	Organisational Databases
INN124	Information Systems Development
INN210	Databases
INN220	Business Analysis
INN221	Technology Management
INN251	Networks
INN255	Security
INN270	Programming
INN271	The Web

Major Options

A Major block has 84 credit points plus a 48 credit point Elective block

No Major

DO	*Any IT postgraduate units not in the "Basic Unit List", such that at least one unit is of the form: INN5xx, INN6xx or INN7xx and the total unit set equals 84 credit points
ELECTIVES	*Any postgraduate units to 48 credit points

Software Architecture

DO	*All of these units:
INN371	Data Structures and Algorithms
INN372	Agile Software Development
INN374	Enterprise Software Architecture
INN570	Internationalisation of Software
PLUS	*Units to 36 credit points from:
INN700	Introduction To Research
INN271	The Web
INN313	Electronic Commerce Site Development
INN373	Web Application Development
INN365	Systems Programming
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3
INN605	Advanced Research 1
INN606	Advanced Research 2
INN607	Advanced Research 3
ELECTIVES	*Any postgraduate units to 48 credit points

Network Management

DO	*All of these units:
INN350	Internet Protocols and Services
INN351	Unix Network Administration
INN352	Network Planning
INN650	Advanced Network Management
PLUS	*Units to 36 credit points from:
INN700	Introduction To Research
INN353	Wireless and Mobile Networks
INN255	Security
INN651	Security Technologies
INN355	Cryptology and Protocols
INN652	Advanced Cryptology
INN550	Computer Forensics
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3
INN605	Advanced Research 1
INN606	Advanced Research 2
INN607	Advanced Research 3
INS450	CCNA 1 and 2 Network Fundamentals and Routing
INS451	CCNA 3 and 4 Lan Switching
INS452	CCNP1: Building Scalable Internetworks
INS453	CCNP 2: Building Multi Layered Switched Networks
INS454	CCNP3: Building Multi Layered Switched Networks
INS455	CCNP4: Optimising Converged Networks
ELECTIVES	*Any postgraduate units to 48 credit points

Enterprise Systems

DO	*All of these units:
INN311	Enterprise Systems
INN312	Enterprise Systems Applications
INN374	Enterprise Software Architecture
INN610	Case Studies in Enterprise Systems
PLUS	*Units to 36 credit points from:
INN700	Introduction To Research
INN340	Database Design
INN342	Enterprise Data Mining and Data Analysis
INN341	Software Development With Oracle
INN321	Business Process Management
INN220	Business Analysis
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3
INN605	Advanced Research 1
INN606	Advanced Research 2
INN607	Advanced Research 3
ELECTIVES	*Any postgraduate units to 48 credit points

Games Production

DO	*All of these units:
INN180	Computer Games Studies
INN181	Introduction to Games Production
INN600	Advanced Readings 1
INN601	Advanced Readings 2
PLUS	*Units to 36 credit points from:
INN220	Business Analysis
INN321	Business Process Management
INN330	Information Management
INN311	Enterprise Systems
INN700	Introduction To Research
ELECTIVE	Projects to 48 credit points

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OR   Do units to 48 credit points from:

GSN401   Managing in the Global Business Environment

GSN405   Strategic Management

GSN403   Understanding Data

GSN413   Financial Management 1

GSN404   Financial Statements Analysis

GSN416   Business Plans 1

GSN406   Human Resource Management Issues

GSN407   Business Communication

GSN409   Organisational Behaviour 1

GSN408   Fundamentals of Marketing Management

GSN415   Understanding Leadership

GSN410   Entrepreneurship

Games Design

DO   *All of these units:

INN180   Computer Games Studies

INN280   Fundamentals of Game Design

INN281   Advanced Game Design

INN272   Interaction Design

PLUS   *Units to 36 credit points from:

INN181   Introduction to Games Production

INN385   Multimedia Systems

INN386   Advanced Multimedia Systems

INN600   Advanced Readings 1

INN601   Advanced Readings 2

INN700   Introduction To Research

KIB201   Concept Development for Game Design and Interactive Media

KIB202   Enabling Immersion

ELECTIVES *Any postgraduate units to 48 credit points

Security

DO   *All of these units:

INN255   Security

INN651   Security Technologies

PLUS   *Units to 60 credit points from:

INN700   Introduction To Research

INN355   Cryptology and Protocols

INN652   Advanced Cryptology

INN550   Computer Forensics

MGN524   Special Topic in Management 1

AYN410   Business Law and Ethics

MGN433   Managing High-Performance Organisations

MGN423   Contemporary Strategic Analysis

GSN440   Risk Management 1

JSN106   Analytical Methods of Intelligence

JSN114   Cybercrime

MAN778   Applications of Discrete Mathematics

LWN139   Privacy Law

LWN125   Electronic Commerce Law

INN690   Minor Project 1

INN691   Minor Project 2

INN692   Minor Project 3

INN693   Project

INN694-1 Project 1

INN694-2 Project 2

INN695   Major Project

INN696-1 Major Project 1

INN696-2 Major Project 2

INN600   Advanced Readings 1

INN601   Advanced Readings 2

INN602   Advanced Readings 3

INN605   Advanced Research 1

INN606   Advanced Research 2

INN607   Advanced Research 3

ELECTIVES *Any postgraduate units to 48 credit points

Library and Information Science

DO   *All of these units:

INN332   Information Retrieval

INN531   Information Services

INN533   Information Organisation

INN333   Information Programs

INN530   Web Content Reliability

INN532   Information Literacy Education

INN632-1 Professional Practice

INN632-2 Professional Practice

INN632-3 Professional Practice

INN632-4 Professional Practice

INN632-5 Professional Practice

INN330   Information Management

INN632-6 Professional Practice

INN331   Management Issues for Information Professionals

ELECTIVES *Any postgraduate units to 24 credit points

          Special Entry Requirements:

          - a bachelor degree in any discipline other than library and information science with a grade point average of at least 4.5 (On a 7 points scale)

          Please note: July entry - part-time only

Information Management

DO   *All of these units:

INN330	Information Management
INN122	Organisational Databases
INN255	Security
INN335	Information Resources
INN220	Business Analysis
INN334	Information Issues and Values
INN540	User Experience
ELECTIVES	*Any postgraduate units to 48 credit points

Executive Information Practice

DO	*All of these units:
INN630	Evidence Based Practice
INN631-1	Executive Coaching
INN631-2	Executive Coaching
INN631-3	Executive Coaching
INN631-4	Executive Coaching
INN631-5	Executive Coaching
INN631-6	Executive Coaching
PLUS	IT Postgraduate units to 24 credit points, not in the "Basic Unit list"
PLUS	*Six of these units:
GSN401	Managing in the Global Business Environment
GSN403	Understanding Data
GSN404	Financial Statements Analysis
GSN405	Strategic Management
GSN406	Human Resource Management Issues
GSN407	Business Communication
GSN408	Fundamentals of Marketing Management
GSN409	Organisational Behaviour 1
GSN410	Entrepreneurship
GSN412	Business Law 1
GSN413	Financial Management 1
GSN415	Understanding Leadership
GSN491	Economics in Business 1
ELECTIVES	*Any postgraduate units to 48 credit points

Special Entry Requirements:

Executive Information Practice has core units from the MBA and as such must also meet the MBA entry requirements

- Demonstrate competency in the English language

- Have a GMAT score of at least 500

- Have at least three years work experience

- At least 10 points from at least two of the three categories - prior work experience, academic achievement and management aptitude

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- For further information, including details

regarding the allocation of points, please see the table at:
http://www.bgsb.qut.edu.au/study/future/entryreq.jsp

Digital Environments

DO	*All of these units:
INN345	Mobile Devices
INN346	Enterprise 2.0
INN347	Web 2.0 Applications
INN540	User Experience
INN690	Minor Project 1
PLUS	*IT postgraduate units to 12 credit points, not in the "Basic Unit List"
KCP402	New Media Studies
ELECTIVES	*Any postgraduate units to 48 credit points

Postgraduate IT Units

Unit List:

INN101	Impact of IT
INN120	Corporate Systems
INN122	Organisational Databases
INN124	Information Systems Development
INN180	Computer Games Studies
INN181	Introduction to Games Production
INN210	Databases
INN220	Business Analysis
INN221	Technology Management
INN230	Foundations of Information Retrieval
INN250	Computer Architectures and Systems
INN251	Networks
INN255	Security
INN270	Programming
INN271	The Web
INN272	Interaction Design
INN280	Fundamentals of Game Design
INN311	Enterprise Systems
INN312	Enterprise Systems Applications
INN313	Electronic Commerce Site Development
INN320	Business Process Modelling
INN321	Business Process Management
INN322	Information Systems Consulting
INN323	Smart Services
INN330	Information Management
INN331	Management Issues for Information Professionals
INN332	Information Retrieval
INN333	Information Programs
INN334	Information Issues and Values

INN335	Information Resources	INN632-1	Professional Practice
INN340	Database Design	INN632-2	Professional Practice
INN341	Software Development With Oracle	INN632-3	Professional Practice
INN342	Enterprise Data Mining and Data Analysis	INN632-4	Professional Practice
INN345	Mobile Devices	INN632-5	Professional Practice
INN346	Enterprise 2.0	INN632-6	Professional Practice
INN347	Web 2.0 Applications	INN650	Advanced Network Management
INN350	Internet Protocols and Services	INN651	Security Technologies
INN351	Unix Network Administration	INN652	Advanced Cryptology
INN352	Network Planning	INN690	Minor Project 1
INN353	Wireless and Mobile Networks	INN691	Minor Project 2
INN355	Cryptology and Protocols	INN692	Minor Project 3
INN365	Systems Programming	INN693	Project
INN370	Software Development	INN694-1	Project 1
INN371	Data Structures and Algorithms	INN694-2	Project
INN372	Agile Software Development	INN695	Major Project
INN373	Web Application Development	INN696-1	Major Project 1
INN374	Enterprise Software Architecture	INN696-2	Major Project 2
INN380	Games Project	INN700	Introduction To Research
INN381	Modelling and Animation Techniques	INN701	Advanced Research Methodologies
INN382	Real Time Rendering Techniques	INN281	Advanced Game Design
INN385	Multimedia Systems	INS040	Professional Experience (Postgraduate)
INN386	Advanced Multimedia Systems	INS450	CCNA 1 and 2 Network Fundamentals and Routing
INN500	IT Project Management	INS451	CCNA 3 and 4 Lan Switching
INN530	Web Content Reliability	INS452	CCNP1: Building Scalable Internetworks
INN531	Information Services	INS453	CCNP 2: Building Multi Layered Switched Networks
INN532	Information Literacy Education	INS454	CCNP3: Building Multi Layered Switched Networks
INN533	Information Organisation	INS455	CCNP4: Optimising Converged Networks
INN540	User Experience		
INN545	Introduction to Health Technology		
INN546	Major Issues in Health Technology		
INN550	Computer Forensics		
INN570	Internationalisation of Software		
INN600	Advanced Readings 1		
INN601	Advanced Readings 2		
INN602	Advanced Readings 3		
INN605	Advanced Research 1		
INN606	Advanced Research 2		
INN607	Advanced Research 3		
INN610	Case Studies in Enterprise Systems		
INN630	Evidence Based Practice		
INN631-1	Executive Coaching		
INN631-2	Executive Coaching		
INN631-3	Executive Coaching		
INN631-4	Executive Coaching		
INN631-5	Executive Coaching		
INN631-6	Executive Coaching		

Master of Information Technology (Advanced) (IT44)

Year offered: 2009
Admissions: Yes
CRICOS code: 053123F
Course duration (full-time): 2 years
Course duration (part-time): 4 years
Domestic fees (indicative): 2009: $6,750 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February and July
International Entry: February and July
Total credit points: 192
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Description

Information technology is now firmly ensconced in society with all the other business practices that constitute modern organisations. This Master of Information Technology course has interfaculty contributions from the Faculties of IT, Business, Creative Industries and Law, matching closely to their relevant IT research areas. Recognition of the burgeoning of specialised areas within the Information Industries is reflected in course structures that provide for ten different majors other than the "No Major" option:

â¢ Software Architecture
â¢ Network Management
â¢ Enterprise Systems
â¢ Games Production
â¢ Games Design
â¢ Security
â¢ Library and Information Science
â¢ Information Management
â¢ Digital Environments
â¢ Executive Information Practice

The structure of this course is designed so that a student does not have to decide on a major until after the first semester. Elective and core units may be selected first. Students must generally complete the core unit and seven units from within their major. The only exception to this structure is in the Library and Information Science major.

Electives:
Students can generally select up to 4 electives; again, the exception is in the Library and Information Science major, where students can select no more than two electives.

Non-cognate students are recommended to select three Basic Elective Units as their electives.

Advanced Research Units (Complementary Studies):
Students who enrol in the Masters Advanced program must complete four advanced research or project units. It is recommended that students complete advanced research and project units in the latter half of their course.

Students wishing to use the Masters Advanced program as a pathway to a PhD program within QUT are advised to enrol in INN700 Introduction to Research as part of their major and take INN701 Advanced Research Methodologies as an elective.

It is possible for students to complete dual Master degrees. Students can receive up to four units of credit for a previous Masters degree as part of their elective unit block. Thus, they are only required to complete the major and core. Students may then receive their Masters degree from the Faculty of Information Technology in two semesters.

Students undertaking units from the MBA program (GSN units) in the Brisbane Graduate School of Business (BGSB) must meet the MBA entry requirements. Please see the BGSB website http://www.bgsb.qut.edu.au/study/mba/mbacourses/ for further information.

Entry requirements

To be eligible for this Masters Coursework program, students must meet one of the following criteria:

â¢ the Australian equivalent of a bachelorâs degree in any discipline with a grade point average of at least 4.5 (on a 7-point scale)
OR
â¢ 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 students must complete the above requirements and also achieve an IELTS overall band score of 6.5 or more with no sub-band below 6.0.

International students with an IELTS overall band score between 6.0 and 6.5 with no sub-band below 5.0 are permitted to complete communication units offered by QUT International College as elective units within their Masters degree. These units must be successfully completed in the first semester of the Masters program.

Special Entry Requirements

Library and Information Science Major:

A bachelor degree in any discipline other than library and information science with a grade point average of at least 4.5 (On a 7 points scale).

Executive information practice major - has core units from the MBA and as such must also meet the MBA entry requirements:

- Demonstrate competency in the English language
- Have a GMAT score of at least 500
- Have at least three years work experience
- At least 10 points from at least two of the three categories
- prior work experience, academic achievement and management aptitude
- For further information, including details regarding the allocation of points, please see the table at:

Course completion rules

Students should meet the following requirements before they are able to complete the Masters Advanced program:
â¢ Students are required to complete 192 credit points of units.
â¢ Students are required to complete the specified core unit.
â¢ Students seeking a single area of specialisation must complete the specific unit requirements for a major.
â¢ Students not seeking a single area of specialisation may graduate with no major.
â¢ Students must complete 48 credit points of project or advanced research units.
â¢ Students may be allowed to take up to four units of electives. These units may be selected from postgraduate units outside of the Faculty of Science and Technology.

Early exit options

Students enrolled in this course may be eligible to exit their courses with a Graduate Certificate (IT85), after successful completion of an approved 48 credit points, or with a Graduate Diploma (IT37), after successful completion of an approved 96 credit points, or with a Masters (IT43) after successful completion of an approved 144 credit points.

Further Information

For further information on this course please contact the course coordinator Dr Ernest Foo on 3138 2782 or email enquiry.scitech@qut.edu.au

IT44 - Master of Information Technology (Advanced)

Core	
INN500	IT Project Management

Major Study Areas	
	Students choose one of the following majors (see Major option list):
	No Major (Information Technology)
	Software Architecture
	Network Management
	Enterprise Systems
	Games Production
	Games Design
	Security
	Executive Information Practice
	Library and Information Science
	Information Management
	Digital Environments

Major Options

A Major block has 84 credit points plus a 48 credit point Elective block

No Major	
DO	*Any IT postgraduate units not in the "Basic Unit List", such that at least one unit is of the form: INN5xx, INN6xx or INN7xx and the total unit set equals 84 credit points
ELECTIVES	*Any postgraduate units to 48 credit points

Software Architecture	
DO	*All of these units:
INN371	Data Structures and Algorithms
INN372	Agile Software Development
INN374	Enterprise Software Architecture
INN570	Internationalisation of Software
PLUS	*Units to 36 credit points from:
INN700	Introduction To Research
INN271	The Web
INN313	Electronic Commerce Site Development
INN373	Web Application Development
INN365	Systems Programming
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3
INN605	Advanced Research 1
INN606	Advanced Research 2
INN607	Advanced Research 3
ELECTIVES	*Any postgraduate units to 48 credit points

Network Management	
DO	*All of these units:
INN350	Internet Protocols and Services
INN351	Unix Network Administration
INN352	Network Planning
INN650	Advanced Network Management
PLUS	*Units to 36 credit points from:
INN700	Introduction To Research
INN353	Wireless and Mobile Networks
INN255	Security
INN651	Security Technologies
INN355	Cryptology and Protocols
INN652	Advanced Cryptology
INN550	Computer Forensics
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3
INN605	Advanced Research 1
INN606	Advanced Research 2
INN607	Advanced Research 3
INS450	CCNA 1 and 2 Network Fundamentals and

	Routing
INS451	CCNA 3 and 4 Lan Switching
INS452	CCNP1: Building Scalable Internetworks
INS453	CCNP 2: Building Multi Layered Switched Networks
INS454	CCNP3: Building Multi Layered Switched Networks
INS455	CCNP4: Optimising Converged Networks
ELECTIVES	*Any postgraduate units to 48 credit points

Enterprise Systems

DO	*All of these units:
INN311	Enterprise Systems
INN312	Enterprise Systems Applications
INN374	Enterprise Software Architecture
INN610	Case Studies in Enterprise Systems
PLUS	*Units to 36 credit points from:
INN700	Introduction To Research
INN340	Database Design
INN342	Enterprise Data Mining and Data Analysis
INN341	Software Development With Oracle
INN321	Business Process Management
INN220	Business Analysis
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3
INN605	Advanced Research 1
INN606	Advanced Research 2
INN607	Advanced Research 3
ELECTIVES	*Any postgraduate units to 48 credit points

Games Production

DO	*All of these units:
INN180	Computer Games Studies
INN181	Introduction to Games Production
INN600	Advanced Readings 1
INN601	Advanced Readings 2
PLUS	*Units to 36 credit points from:
INN220	Business Analysis
INN321	Business Process Management
INN330	Information Management
INN311	Enterprise Systems
INN700	Introduction To Research
ELECTIVES	Projects to 48 credit points
OR	Do units to 48 credit points from:
GSN401	Managing in the Global Business Environment
GSN405	Strategic Management

GSN403	Understanding Data
GSN413	Financial Management 1
GSN404	Financial Statements Analysis
GSN416	Business Plans 1
GSN406	Human Resource Management Issues
GSN407	Business Communication
GSN409	Organisational Behaviour 1
GSN408	Fundamentals of Marketing Management
GSN415	Understanding Leadership
GSN410	Entrepreneurship

Games Design

DO	*All of these units:
INN180	Computer Games Studies
INN280	Fundamentals of Game Design
INN281	Advanced Game Design
INN272	Interaction Design
PLUS	*Units to 36 credit points from:
INN181	Introduction to Games Production
INN385	Multimedia Systems
INN386	Advanced Multimedia Systems
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN700	Introduction To Research
KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion
ELECTIVES	*Any postgraduate units to 48 credit points

Security

DO	*All of these units:
INN255	Security
INN651	Security Technologies
PLUS	*Units to 60 credit points from:
INN700	Introduction To Research
INN355	Cryptology and Protocols
INN652	Advanced Cryptology
INN550	Computer Forensics
MGN524	Special Topic in Management 1
AYN410	Business Law and Ethics
MGN433	Managing High-Performance Organisations
MGN423	Contemporary Strategic Analysis
GSN440	Risk Management 1
JSN106	Analytical Methods of Intelligence
JSN114	Cybercrime
MAN778	Applications of Discrete Mathematics
LWN139	Privacy Law
LWN125	Electronic Commerce Law

INN690	Minor Project 1
INN691	Minor Project 2
INN692	Minor Project 3
INN693	Project
INN694-1	Project 1
INN694-2	Project 2
INN695	Major Project
INN696-1	Major Project 1
INN696-2	Major Project 2
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3
INN605	Advanced Research 1
INN606	Advanced Research 2
INN607	Advanced Research 3
ELECTIVES	*Any postgraduate units to 48 credit points

Library and Information Science

DO	*All of these units:
INN332	Information Retrieval
INN531	Information Services
INN533	Information Organisation
INN333	Information Programs
INN530	Web Content Reliability
INN532	Information Literacy Education
INN632-1	Professional Practice
INN632-2	Professional Practice
INN632-3	Professional Practice
INN632-4	Professional Practice
INN632-5	Professional Practice
INN330	Information Management
INN632-6	Professional Practice
INN331	Management Issues for Information Professionals
ELECTIVES	*Any postgraduate units to 24 credit points

Special Entry Requirements:

- a bachelor degree in any discipline other than library and information science with a grade point average of at least 4.5 (On a 7 points scale)

Please note: July entry - part-time only

Information Management

DO	*All of these units:
INN330	Information Management
INN122	Organisational Databases
INN255	Security
INN335	Information Resources

INN220	Business Analysis
INN334	Information Issues and Values
INN540	User Experience
ELECTIVES	*Any postgraduate units to 48 credit points

Executive Information Practice

DO	*All of these units:
INN630	Evidence Based Practice
INN631-1	Executive Coaching
INN631-2	Executive Coaching
INN631-3	Executive Coaching
INN631-4	Executive Coaching
INN631-5	Executive Coaching
INN631-6	Executive Coaching
PLUS	IT Postgraduate units to 24 credit points, not in the "Basic Unit list"
PLUS	*Six of these units:
GSN401	Managing in the Global Business Environment
GSN403	Understanding Data
GSN404	Financial Statements Analysis
GSN405	Strategic Management
GSN406	Human Resource Management Issues
GSN407	Business Communication
GSN408	Fundamentals of Marketing Management
GSN409	Organisational Behaviour 1
GSN410	Entrepreneurship
GSN412	Business Law 1
GSN413	Financial Management 1
GSN415	Understanding Leadership
GSN491	Economics in Business 1
ELECTIVES	*Any postgraduate units to 48 credit points

Special Entry Requirements:

Executive Information Practice has core units from the MBA and as such must also meet the MBA entry requirements

- Demonstrate competency in the English language

- Have a GMAT score of at least 500

- Have at least three years work experience

- At least 10 points from at least two of the three categories - prior work experience, academic achievement and management aptitude

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- For further information, including details regarding the allocation of points, please see the table at: http://www.bgsb.qut.edu.au/study/future/entryreq.jsp

Digital Environments

DO	*All of these units:		INN124	Information Systems Development
INN345	Mobile Devices		INN180	Computer Games Studies
INN346	Enterprise 2.0		INN181	Introduction to Games Production
INN347	Web 2.0 Applications		INN210	Databases
INN540	User Experience		INN220	Business Analysis
INN690	Minor Project 1		INN221	Technology Management
PLUS	*IT postgraduate units to 12 credit points, not in the "Basic Unit List"		INN230	Foundations of Information Retrieval
			INN250	Computer Architectures and Systems
KCP402	New Media Studies		INN251	Networks
ELECTIVES	*Any postgraduate units to 48 credit points		INN255	Security
			INN270	Programming
			INN271	The Web

Basic Unit List

			INN272	Interaction Design
INN101	Impact of IT		INN280	Fundamentals of Game Design
INN120	Corporate Systems		INN311	Enterprise Systems
INN122	Organisational Databases		INN312	Enterprise Systems Applications
INN124	Information Systems Development		INN313	Electronic Commerce Site Development
INN210	Databases		INN320	Business Process Modelling
INN220	Business Analysis		INN321	Business Process Management
INN221	Technology Management		INN322	Information Systems Consulting
INN251	Networks		INN323	Smart Services
INN255	Security		INN330	Information Management
INN270	Programming		INN331	Management Issues for Information Professionals
INN271	The Web			
			INN332	Information Retrieval

IT44 - Advanced Research/Project Units

Major Study Areas			INN333	Information Programs
INN600	Advanced Readings 1		INN334	Information Issues and Values
INN601	Advanced Readings 2		INN335	Information Resources
INN602	Advanced Readings 3		INN340	Database Design
INN605	Advanced Research 1		INN341	Software Development With Oracle
INN606	Advanced Research 2		INN342	Enterprise Data Mining and Data Analysis
INN607	Advanced Research 3		INN345	Mobile Devices
INN690	Minor Project 1		INN346	Enterprise 2.0
INN691	Minor Project 2		INN347	Web 2.0 Applications
INN692	Minor Project 3		INN350	Internet Protocols and Services
INN693	Project		INN351	Unix Network Administration
INN694-1	Project 1		INN352	Network Planning
INN694-2	Project 2		INN353	Wireless and Mobile Networks
INN695	Major Project		INN355	Cryptology and Protocols
INN696-1	Major Project 1		INN365	Systems Programming
INN696-2	Major Project 2		INN370	Software Development
			INN371	Data Structures and Algorithms

Postgraduate IT Units

			INN372	Agile Software Development
Unit List:			INN373	Web Application Development
INN101	Impact of IT		INN374	Enterprise Software Architecture
INN120	Corporate Systems		INN380	Games Project
INN122	Organisational Databases		INN381	Modelling and Animation Techniques
			INN382	Real Time Rendering Techniques

INN385	Multimedia Systems		INS040	Professional Experience (Postgraduate)
INN386	Advanced Multimedia Systems		INS450	CCNA 1 and 2 Network Fundamentals and Routing
INN500	IT Project Management		INS451	CCNA 3 and 4 Lan Switching
INN530	Web Content Reliability		INS452	CCNP1: Building Scalable Internetworks
INN531	Information Services		INS453	CCNP 2: Building Multi Layered Switched Networks
INN532	Information Literacy Education		INS454	CCNP3: Building Multi Layered Switched Networks
INN533	Information Organisation		INS455	CCNP4: Optimising Converged Networks
INN540	User Experience			
INN545	Introduction to Health Technology			
INN546	Major Issues in Health Technology			
INN550	Computer Forensics			
INN570	Internationalisation of Software			
INN600	Advanced Readings 1			
INN601	Advanced Readings 2			
INN602	Advanced Readings 3			
INN605	Advanced Research 1			
INN606	Advanced Research 2			
INN607	Advanced Research 3			
INN610	Case Studies in Enterprise Systems			
INN630	Evidence Based Practice			
INN631-1	Executive Coaching			
INN631-2	Executive Coaching			
INN631-3	Executive Coaching			
INN631-4	Executive Coaching			
INN631-5	Executive Coaching			
INN631-6	Executive Coaching			
INN632-1	Professional Practice			
INN632-2	Professional Practice			
INN632-3	Professional Practice			
INN632-4	Professional Practice			
INN632-5	Professional Practice			
INN632-6	Professional Practice			
INN650	Advanced Network Management			
INN651	Security Technologies			
INN652	Advanced Cryptology			
INN690	Minor Project 1			
INN691	Minor Project 2			
INN692	Minor Project 3			
INN693	Project			
INN694-1	Project 1			
INN694-2	Project			
INN695	Major Project			
INN696-1	Major Project 1			
INN696-2	Major Project 2			
INN700	Introduction To Research			
INN701	Advanced Research Methodologies			
INN281	Advanced Game Design			

Master of Information Technology (Non-IT Graduates) (IT45)

Year offered: 2009
Admissions: No
CRICOS code: 003776E
Course duration (full-time): 3 semesters
Course duration (part-time): 6 semesters
Domestic fees (indicative): 2009: $6,750 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Total credit points: 144
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Course Update

From semester one, 2009 this course will not be available for commencing students. IT45 will only be available for continuing students. New students - please refer to IT43. Please contact enquiry.scitech@qut.edu.au for any enquiries.

Course Overview

The Master of Information Technology â with associated nested graduate diploma and graduate certificates â can be tailored for non-IT graduates looking to broaden their career opportunities by gaining a postgraduate IT qualification.

Students may take the Master of Information Technology as a broad-based qualification or may choose to specialise in a particular area such as networks, security, enterprise systems, software development, IT management or games development.

With multiple specialisations now emerging in IT, applicants with existing IT qualifications may wish to study advanced units in their own specialisation, and/or move into an entirely different study of IT. It is highly recommended that students from a non-IT background commence study with a set of introductory units.

Non-IT graduates who are unsure about enrolling in a full Masters program may like to enrol in a Graduate Diploma which can then be used to articulate into the Master of Information Technology (IT45).

Entry Requirements

A bachelor degree in a discipline other than information technology with a grade point average of at least 4.5 (on a 7-point scale) **AND** demonstrated competence in the basic skills and concepts of personal or office computer usage.

Course Structure

With the availability of a nested graduate diploma and graduate certificates, students in the Master of Information Technology may achieve a number of awards on their pathway to a Masters.

Students may be eligible to receive a Graduate Diploma in Information Technology (IT38), after completing 96 credit points (8 units), including the compulsory unit in IT Project Management.

Students may also be eligible to receive one or more Graduate Certificates in Information Technology, after completing 48 credit points (4 units) consisting of the four specified units in a concentrated area of study.

Further Information

For further information contact the course coordinator Dr Ernest Foo on enquiry.scitech@qut.edu.au or call 07 3138 2782

Unit Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:
Postgraduate Translation Table
If you have completed the unit(s) listed under the âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Potential Careers:

Business Analyst, Data Communications Specialist, Database Manager, Electronic Commerce Developer, Internet Professional, Network Administrator, Network Manager, Programmer, Software Engineer, Systems Analyst, Systems Manager, Systems Programmer.

Master of Information Technology (Advanced) (IT48)

Year offered: 2009
Admissions: No
CRICOS code: 053123F
Course duration (full-time): 2 years (4 semesters)
Course duration (part-time): 4 years (8 semesters)
Domestic fees (indicative): 2009: $6,750 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Total credit points: 192
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Course Update

From semester one, 2009 this course will not be available for commencing students. IT48 will only be available for continuing students. New students - please refer to IT43. Please contact enquiry.scitech@qut.edu.au for any enquiries.

Course Overview

The Master of Information Technology (Advanced) builds on the existing Master of Information Technology for IT graduates, with the addition of further units to enhance studentsâ knowledge in another discipline or add depth to an IT specialisation. As students progress through their studies, there is the opportunity to accumulate graduate certificates and a graduate diploma, depending on how students choose to focus their studies.

Entry Requirements

A bachelor degree majoring in information technology with a grade point average of at least 4.5 (on a 7-point scale) **OR** evidence of work experience and/or training equivalent to an IT major.

Course Structure

With the availability of a nested graduate diploma and graduate certificates, students in the Master of Information Technology (Advanced) may achieve a number of awards on their pathway to a Masters.

Students may be eligible to receive a Graduate Diploma in Information Technology (IT35), after completing 96 credit points (8 units), including the compulsory unit in IT Project Management.

Students may also be eligible to receive one or more Graduate Certificates in Information Technology, after completing 48 credit points (4 units) consisting of the four specified units in a concentrated area of study.

Unit Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:
Postgraduate Translation Table
If you have completed the unit(s) listed under the âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code

Further Information

For further information contact the course coordinator Dr Ernest Foo on enquiry.scitech@qut.edu.au or call 3138 2782

Master of Business Process Management (IT53)

Year offered: 2009
Admissions: Yes
CRICOS code: 062622A
Course duration (full-time): 1.5 years
Course duration (part-time): 3 years
Domestic fees (indicative): 2009: Full fee tuition $7,250 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February, July
International Entry: February, July
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Taizan Chan
Campus: Gardens Point

Course Overview

The Master of Business Process Management will provide graduates with the skills and knowledge to create and align information systems to effectively support business and enable business strategy.

The program examines business-IT alignment issues through appropriate theory and skill development, and provides career enhancement opportunities into senior management and governance roles.

Students may undertake study in the areas of corporate systems and business process management, IT professional services (including project management and IT consulting), enterprise architecture and systems, and information and knowledge management within business processes.

Entry Requirements

A bachelor degree with a grade point average of at least 4.5 (on a 7-point scale) **AND** demonstrated competence in the basic skills and concepts of personal or office computer usage.

Course Structure

Students may be eligible to receive a Graduate Certificate in Business Process Management after completing 48 credit points (4 units) consisting of the four specified units.

Students may also be eligible to receive a Graduate Certificate in Corporate Systems Management after completing 48 credit points (4 units) consisting of the four specified units.

Unit Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:
Postgraduate Translation Table
If you have completed the unit(s) listed under the âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code

Further Information

For further information contact the course coordinator Dr Taizan Chan on enquiry.scitech@qut.edu.au or call 3138 2782

Master of Business Process Management

IT graduates Gateway Units 4 only	
INN700	Introduction To Research
INN311	Enterprise Systems
INN340	Database Design
INN312	Enterprise Systems Applications
INN221	Technology Management
INN322	Information Systems Consulting
INN330	Information Management
INN500	IT Project Management

Non-IT graduates Basic Units 4 only	
INN120	Corporate Systems
INN101	Impact of IT
INN122	Organisational Databases
INN123	Project Management Practice
INN124	Information Systems Development
INN220	Business Analysis
INN221	Technology Management

Block B Core Units 4 Minimum	
INN323	Smart Services
INN610	Case Studies in Enterprise Systems
INN331	Management Issues for Information Professionals
INN321	Business Process Management
INN320	Business Process Modelling
	Project Unit (Unit code yet to be finalised)

Block C Elective Units 24cp Minimum	
	12 cp FIT industry or research project
	24 cp FIT industry or research project
	48 cp FIT industry or research project
	12 cp QUT post-graduate elective units

Grad Cert Business Process Management IT61 exit point only	
INN311	Enterprise Systems
INN610	Case Studies in Enterprise Systems
INN321	Business Process Management
INN320	Business Process Modelling

Grad Cert Corporate Systems Management IT62 exit point only	
INN331	Management Issues for Information Professionals

	Project Unit (Unit code yet to be finalised)
AND	Students must choose 2 of the following units:
INN120	Corporate Systems
INN101	Impact of IT
INN122	Organisational Databases
INN123	Project Management Practice
INN124	Information Systems Development
INN220	Business Analysis
INN221	Technology Management

Postgraduate IT Units

Unit List:

INN101	Impact of IT
INN120	Corporate Systems
INN122	Organisational Databases
INN124	Information Systems Development
INN180	Computer Games Studies
INN181	Introduction to Games Production
INN210	Databases
INN220	Business Analysis
INN221	Technology Management
INN230	Foundations of Information Retrieval
INN250	Computer Architectures and Systems
INN251	Networks
INN255	Security
INN270	Programming
INN271	The Web
INN272	Interaction Design
INN280	Fundamentals of Game Design
INN311	Enterprise Systems
INN312	Enterprise Systems Applications
INN313	Electronic Commerce Site Development
INN320	Business Process Modelling
INN321	Business Process Management
INN322	Information Systems Consulting
INN323	Smart Services
INN330	Information Management
INN331	Management Issues for Information Professionals
INN332	Information Retrieval
INN333	Information Programs
INN334	Information Issues and Values
INN335	Information Resources
INN340	Database Design
INN341	Software Development With Oracle
INN342	Enterprise Data Mining and Data Analysis
INN345	Mobile Devices
INN346	Enterprise 2.0
INN347	Web 2.0 Applications
INN350	Internet Protocols and Services
INN351	Unix Network Administration
INN352	Network Planning
INN353	Wireless and Mobile Networks
INN355	Cryptology and Protocols
INN365	Systems Programming
INN370	Software Development
INN371	Data Structures and Algorithms
INN372	Agile Software Development
INN373	Web Application Development
INN374	Enterprise Software Architecture
INN380	Games Project
INN381	Modelling and Animation Techniques
INN382	Real Time Rendering Techniques
INN385	Multimedia Systems
INN386	Advanced Multimedia Systems
INN500	IT Project Management
INN530	Web Content Reliability
INN531	Information Services
INN532	Information Literacy Education
INN533	Information Organisation
INN540	User Experience
INN545	Introduction to Health Technology
INN546	Major Issues in Health Technology
INN550	Computer Forensics
INN570	Internationalisation of Software
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3
INN605	Advanced Research 1
INN606	Advanced Research 2
INN607	Advanced Research 3
INN610	Case Studies in Enterprise Systems
INN630	Evidence Based Practice
INN631-1	Executive Coaching
INN631-2	Executive Coaching
INN631-3	Executive Coaching
INN631-4	Executive Coaching
INN631-5	Executive Coaching
INN631-6	Executive Coaching
INN632-1	Professional Practice
INN632-2	Professional Practice
INN632-3	Professional Practice
INN632-4	Professional Practice
INN632-5	Professional Practice
INN632-6	Professional Practice

INN650	Advanced Network Management
INN651	Security Technologies
INN652	Advanced Cryptology
INN690	Minor Project 1
INN691	Minor Project 2
INN692	Minor Project 3
INN693	Project
INN694-1	Project 1
INN694-2	Project
INN695	Major Project
INN696-1	Major Project 1
INN696-2	Major Project 2
INN700	Introduction To Research
INN701	Advanced Research Methodologies
INN281	Advanced Game Design
INS040	Professional Experience (Postgraduate)
INS450	CCNA 1 and 2 Network Fundamentals and Routing
INS451	CCNA 3 and 4 Lan Switching
INS452	CCNP1: Building Scalable Internetworks
INS453	CCNP 2: Building Multi Layered Switched Networks
INS454	CCNP3: Building Multi Layered Switched Networks
INS455	CCNP4: Optimising Converged Networks

Master of Information Technology (Research) (IT60)

Year offered: 2009
Admissions: Yes
CRICOS code: 020309B
Course duration (full-time): 1.5 years or 3 semesters
Course duration (part-time): 3 years or 6 semesters
Domestic fees (indicative): Aust citizens or PRs will be awarded an RTS/RTA place or a QUT sponsorship for tuition fees. If you exceed the max time, you will be charged - 2009: $6,720 per semester (indicative)
International Fees (per semester): 2009: $11,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: At any time
International Entry: At any time
Total credit points: 144
Course coordinator: Associate Professor Shlomo Geva
Campus: Gardens Point

Course Overview

The Master of Information Technology (Research) provides specialist education in information technology through a program that involves either an original contribution to knowledge or an original application of existing knowledge.

Students choose a research topic from recognised areas of research concentration within the Faculty. Research can be carried out in a research centre of the Faculty, in the studentâs place of employment or in a sponsoring institution.

Entry Requirements

Applicants must have:
â¢ an approved degree in information technology from a recognised tertiary institution or an equivalent qualification, with a grade point average of 5 (on a 7-point scale) **OR**
â¢ an approved degree from a recognised tertiary institution plus evidence of professional experience and skills to satisfy the academic board that the applicant possesses the capacity to pursue the course of study. The evidence should include details of any project or research activities undertaken.

Research Areas

Areas of research interest and contact details can be obtained from the Faculty website

Course Structure

Students entering the degree with second-class honours division A (or better) in an IT-related course will often complete the degree in one year full-time. The length of the program is generally expected to be 18 months full-time (including six months of provisional registration) or three years part-time (including one year of provisional registration).

Assessment for this research masters is based on a program of supervised research and investigation, culminating in a thesis.

Programs may include some coursework in support of the conduct of research and preparation of a thesis. Candidates are required to have regular, face-to-face interaction with supervisors and to participate in University scholarly activities such as research seminars, teaching and publication.

Further Information

Visit www.scitech.qut.edu.au email infotech.research@qut.edu.au, or phone +61 7 3138 1000

Course structure

Full-time Course Structure
A program of research and investigation developed in conjunction with the Principal
Supervisor and approved by the Faculty Research Committee (Workload equivalent to 48 credit points per semester)

Part-time Course Structure
A program of research and investigation developed in conjunction with the Principal
Supervisor and approved by the Faculty Research Committee (Workload equivalent to 24 credit points per semester)

Potential Careers:

Business Analyst, Computer Games Developer, Data Communications Specialist, Database Manager, Electronic Commerce Developer, Internet Professional, Network Administrator, Network Manager, Programmer, Software Engineer, Systems Analyst, Systems Manager, Systems Programmer.

Master of Information Management(refer to IT43) (IT70)

Year offered: 2009
Admissions: No
CRICOS code: 053705F
Course duration (full-time): 3 semesters
Course duration (part-time): 6 semesters
Domestic fees (indicative): 2009: $6,750 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Assumed knowledge: See Entry Requirements
Total credit points: 144
Course coordinator: Dr Helen Partridge
Campus: Gardens Point

Course is under review

From semester one, 2009 this course will not be available for commencing students. IT70 will only be available for continuing students. New students - please refer to IT43. Please contact enquiry.scitech@qut.edu.au for any enquiries.

Course Overview

This program provides graduates with the skills to find employment in a broad spectrum of information work in public, academic and special libraries and within corporate and government information management contexts. Students will come to understand and manage the complexities of information which impact on society.

Course Structure

With the availability of a nested graduate diploma, students in the Master of Information Management may be eligible to receive a Graduate Diploma in Information Management (IT72), after completing 96 credit points (8 units), consisting of eight specified units in a concentrated area of study.

Entry Requirements

To be eligible for this course, students must have demonstrated competence in the basic skills and concepts of personal or office computer usage and must meet one of the following criteria:
â¢ a bachelor degree in a discipline other than library or information studies with a grade point average of at least 4.5 (on a 7-point scale) **OR**
â¢ evidence of recognised prior learning (e.g. at least five years of relevant full-time work experience).

Professional Recognition

The Master of Information Management is professionally recognised by the Australian Library and Information Association (ALIA).

Unit Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:
Postgraduate Translation Table
If you have completed the unit(s) listed under the âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code

Further Information

Please contact the course coordinator Dr Helen Partridge on enquiry.scitech@qut.edu.au or call 3138 2782

IT70 - Master of Information Management - Full-time

Course Structure 2009

From semester one, 2009 this course will not be available for commencing students. IT70 will only be available for continuing students. New students - please refer to IT43. Please contact fit.enquiry@qut.edu.au for any enquiries.

Year 1, Semester 1

INN331	Management Issues for Information Professionals
INN333	Information Programs
INN335	Information Resources
INN632-1	Professional Practice
INN632-2	Professional Practice

Year 1, Semester 2

INN533	Information Organisation
INN531	Information Services
INN330	Information Management
INN632-3	Professional Practice
INN632-4	Professional Practice

Year 2, Semester 1

INN530	Web Content Reliability
INN532	Information Literacy Education
INN500	IT Project Management
INN632-5	Professional Practice
INN632-6	Professional Practice

IT70 - Master of Information Management - Part-time

Course Structure 2009

From semester one, 2009 this course will not be available for commencing students. IT70 will only be available for continuing students. New students - please refer to IT43. Please contact fit.enquiry@qut.edu.au for any enquiries.

Year 1, Semester 1

INN335	Information Resources
INN122	Organisational Databases
INN632-1	Professional Practice

Year 1, Semester 2

INN330	Information Management
INN533	Information Organisation
INN632-2	Professional Practice

Year 2, Semester 1		
INN331	Management Issues for Information Professionals	
INN333	Information Programs	
INN632-3	Professional Practice	

Year 2, Semester 2		
INN531	Information Services	
	Elective	
INN632-4	Professional Practice	

Year 3, Semester 1		
INN530	Web Content Reliability	
INN532	Information Literacy Education	
INN632-5	Professional Practice	

Year 3, Semester 2		
INN690	Minor Project 1	
	Students who choose to undertake ITS010 Cooperative Education Program substitute ITN370 for this unit	
INN632-6	Professional Practice	

Potential Careers:

Administrator, Information Officer, Librarian.

Graduate Certificate in Information Management (Library Studies)(refer to IT43) (IT73)

Year offered: 2009
Admissions: No
Course duration (part-time): 2 semesters
Domestic fees (indicative): 2009: $6,750 (indicative) per semester
Assumed knowledge: See Entry Requirements
Total credit points: 48
Course coordinator: Helen Partridge
Campus: Gardens Point

Course Overview

The Graduate Certificate in Information Management (Library Studies) is a career development course for practising library and information professionals and consists of four designated units (48 credit points).

Graduates may find employment as a librarian, community information officer, cataloguer, research analyst, information services manager, business information specialist, information broker, corporate librarian, digital library coordinator, law librarian, learning resources officer or library media specialist.

Course Update

From semester one, 2009 this course will not be available for commencing students. IT73 will only be available for continuing students. New students - please refer to IT43. Please contact enquiry.scitech@qut.edu.au for any enquiries.

Entry Requirements

To be eligible for this course, students must have demonstrated competence in the basic skills and concepts of personal or office computer usage and must meet one of the following criteria:
â¢ an undergraduate or postgraduate qualification in library and information studies with a grade point average of at least 4.5 (on a 7-point scale) **OR**
â¢ evidence of recognised prior learning (for example, at least five years of relevant full-time work experience).

International Student Entry

International students cannot gain direct entry into this program as it is offered on a part-time basis only.

Unit Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:
Postgraduate Translation Table
If you have completed the unit(s) listed under the âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code

Further Information

For further information contact the course coordinator Helen Partridge on enquiry.scitech@qut.edu.au or call 3138 2782

Potential Careers:
Librarian.

Graduate Certificate in Information Management (Information and Knowledge Management) (IT74)

Year offered: 2009
Admissions: No
Course duration (part-time): 2 semesters
Domestic fees (indicative): 2009: $6,750 (indicative) per semester
Assumed knowledge: See Entry Requirements
Total credit points: 48
Course coordinator: Helen Partridge
Campus: Gardens Point

Course Overview

The Graduate Certificate in Information Management (Information and Knowledge Management) consists of four designated units (48 credit points).

Graduates may find employment as a knowledge manager, information
manager, metadata analyst, metadata development specialist, information architect, policy officer, document manager, document analyst, database manager, information analyst or strategic information manager.

Course Update

From semester one, 2009 this course will not be available for commencing students. IT74 will only be available for continuing students. New students - please refer to IT43. Please contact enquiry.scitech@qut.edu.au for any enquiries.

Entry Requirements

To be eligible for this course, students must have demonstrated competence in the basic skills and concepts of personal or office computer usage and must meet one of the following criteria:
â¢ a bachelor degree in any discipline with a grade point average of at least 4.5 (on a 7-point scale) **OR**
â¢ evidence of recognised prior learning (for example, at least five years of relevant full-time work experience).

International Student Entry

International students cannot gain direct entry into this program as it is offered on a part-time basis only.

Unit Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:
Postgraduate Translation Table
If you have completed the unit(s) listed under the âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Further Information

For further information contact the course coordinator Helen Partridge on enquiry.scitech@qut.edu.au or call 3138 2782

Potential Careers:

Librarian.

Graduate Certificate in Information Management (Records Management) (IT75)

Year offered: 2009
Admissions: No
Course duration (part-time): 2 semesters
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Assumed knowledge: See Entry Requirements
Total credit points: 48
Course coordinator: Dr Helen Partridge
Campus: Gardens Point

Course Overview

The Graduate Certificate in Information Management (Records Management) consists of four designated units (48 credit points).

Graduates may find employment as a records manager, document manager, information analyst or manager, metadata analyst or development specialist.

Course Update

From semester one, 2009 this course will not be available for commencing students. IT75 will only be available for continuing students. New students - please refer to IT43. Please contact enquiry.scitech@qut.edu.au for any enquiries.

Entry Requirements

To be eligible for this course, students must have demonstrated competence in the basic skills and concepts of personal or office computer usage and must meet one of the following criteria:
â¢ a bachelor degree in any discipline with a grade point average of at least 4.5 (on a 7-point scale) **OR**
â¢ evidence of recognised prior learning (for example, at least five years of relevant full-time work experience).

International Student Entry

International students cannot gain direct entry into this program as it is offered on a part-time basis only.

Unit Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:
Postgraduate Translation Table
If you have completed the unit(s) listed under the âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Further Information

For further information contact the course coordinator Helen Partridge on enquiry.scitech@qut.edu.au or call 3138 2782

Potential Careers:

Librarian.

Graduate Certificate in Information Management (Web Management) (IT76)

Year offered: 2009
Admissions: No
Course duration (part-time): 2 semesters
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Assumed knowledge: See Entry Requirements
Total credit points: 48
Course coordinator: Dr Helen Partridge
Campus: Gardens Point

Course Overview

The Graduate Certificate in Information Management (Web Management) consists of four designated units (48 credit points).

Graduates may find employment as an information manager, knowledge manager, webmaster, intranet content manager, electronic content librarian or web librarian.

Course Update

From semester one, 2009 this course will not be available for commencing students. IT76 will only be available for continuing students. New students - please refer to IT43. Please contact enquiry.scitech@qut.edu.au for any enquiries.

Entry Requirements

To be eligible for enrolment in this course, students must have demonstrated competence in the basic skills and concepts of personal or office computer usage and must meet one of the following criteria:
â¢ a bachelor degree in any discipline with a grade point average of at least 4.5 (on a 7-point scale) **OR**
â¢ evidence of recognised prior learning (for example, at least five years of relevant full-time work experience).

International Student Entry

International students cannot gain direct entry into this program as it is offered on a part-time basis only.

Unit Incompatibility/Translation Information

Details on the translation and incompatibility of old and new units is located here:
Postgraduate Translation Table
If you have completed the unit(s) listed under the âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Further Information

For further information contact the course coordinator Helen Partridge on enquiry.scitech@qut.edu.au or call 3138 2782

Potential Careers:

Librarian.

Doctor of Information Technology (IT80)

Year offered: 2009
Admissions: Yes
CRICOS code: 063035A
Course duration (full-time): 3 years
Course duration (part-time): 6 years
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
International Fees (per semester): 2009: $11,250 (indicative) per semester *(subject to annual review)*
International Entry: February and July
Course coordinator: Associate Professor Shlomo Geva
Campus: Gardens Point

Course Overview

The Doctor of Information Technology is a professional doctorate designed for candidates to contribute towards professional practice and is appropriate for those wishing to pursue a problem within their workplace expertise. The focal problem in the professional doctorate is an application of theory to an existing significant industry problem.

Entry Requirements

Industry experience in a field relevant to the professional doctorate and possess one of the following:
â¢ a four-year degree or its equivalent with first-class or second-class honours division A, or
â¢ a masters degree, or
â¢ a three-year bachelor degree and industry experience, or
â¢ an equivalent combination of experience and/or education and training.

Students with exemplary professional practice who do not meet one of the above criteria may still be eligible to apply and should consult the course coordinator. Before submitting an application for enrolment, potential candidates should consult the course coordinator for assistance with preparation of the appropriate application form concerning eligibility and special interests.

Course Structure

The degree consists of 288 credit points of which up to 96 credit points are coursework, and the balance is research. Students are expected to develop a high level of research skill and analysis and make an original contribution to knowledge and professional practice. The Doctor of Information Technology will provide focused research and coursework studies in the IT's research areas.

Research Area

Areas of research interest and contact details can be obtained from the Faculty website.

Further Information

Visit www.scitech.qut.edu.au, email infotech.research@qut.edu.au, or phone +61 7 3138 1000

IT80 - course structure with one 192 cps thesis

Notes	
	This is an indicative course structure only. Students should discuss their program with the Course Coordinator.

Year 1, Semester 1	
INNXXX	PG coursework elective unit
INNXXX	PG coursework elective unit
INNXXX	PG coursework elective unit
INNXXX	PG coursework elective unit
	Allows you an opportunity to extend your knowledge in related fields, improve your understanding of project management, develop venture capital, leadership competencies or to lead research groups.
	Coursework should normally be completed within the first year, subject to unit availability. Variations to this would be made in consultation with your supervisory team.

Year 1, Semester 2	
INN690	Minor Project 1
	A literature review of the related theory.
INN691	Minor Project 2
	A literature review of the relevant reseach methods and approaches that may be of use.
INN692	Minor Project 3
	A pilot study of the selected theory and method to a subset of the problem in order to test the efficacy of the methods and theories selected.
INN700	Introduction To Research
	Students construct an integrated research proposal.

Year 2, Semester 1	
INR400-1	Thesis 4
INR400-2	Thesis 4

Year 2, Semester 2	
INR400-3	Thesis 4
INR400-4	Thesis 4

Year 3, Semester 1	
INR400-5	Thesis 4
INR400-6	Thesis 4

Year 3, Semester 2	
INR400-7	Thesis 4
INR400-8	Thesis 4

IT80 - course structure with two 96 cps theses

Notes	
	This is an indicative course structure only. Students should discuss their program with the Course Coordinator.

Year 1, Semester 1	
INNXXX	PG coursework elective unit

INNXXX	PG coursework elective unit
INNXXX	PG coursework elective unit
INNXXX	PG coursework elective unit

Allows you an opportunity to extend your knowledge in related fields, improve your understanding of project management, develop venture capital, leadership competencies or to lead research groups.

Coursework should normally be completed within the first year, subject to unit availability. Variations to this would be made in consultation with your supervisory team.

Year 1, Semester 2

| INN690 | Minor Project 1 |

A literature review of the related theory.

| INN691 | Minor Project 2 |

A literature review of the relevant research methods and approaches that may be of use.

| INN692 | Minor Project 3 |

A pilot study of the selected theory and method to a subset of the problem in order to test the efficacy of the methods and theories selected.

| INN700 | Introduction To Research |

Student constructs an integrated research proposal.

Year 2, Semester 1

INR100-1	Thesis 1
INR100-2	Thesis 1
INR100-3	Thesis 1
INR100-4	Thesis 1

Year 2, Semester 2

INR100-5	Thesis 1
INR100-6	Thesis 1
INR100-7	Thesis 1
INR100-8	Thesis 1

Year 3, Semester 1

INR200-1	Thesis 2
INR200-2	Thesis 2
INR200-3	Thesis 2
INR200-4	Thesis 2

Year 3, Semester 2

INR200-5	Thesis 2
INR200-6	Thesis 2
INR200-7	Thesis 2
INR200-8	Thesis 2

Postgraduate IT Units

Unit List:

| INN101 | Impact of IT |

INN120	Corporate Systems
INN122	Organisational Databases
INN124	Information Systems Development
INN180	Computer Games Studies
INN181	Introduction to Games Production
INN210	Databases
INN220	Business Analysis
INN221	Technology Management
INN230	Foundations of Information Retrieval
INN250	Computer Architectures and Systems
INN251	Networks
INN255	Security
INN270	Programming
INN271	The Web
INN272	Interaction Design
INN280	Fundamentals of Game Design
INN311	Enterprise Systems
INN312	Enterprise Systems Applications
INN313	Electronic Commerce Site Development
INN320	Business Process Modelling
INN321	Business Process Management
INN322	Information Systems Consulting
INN323	Smart Services
INN330	Information Management
INN331	Management Issues for Information Professionals
INN332	Information Retrieval
INN333	Information Programs
INN334	Information Issues and Values
INN335	Information Resources
INN340	Database Design
INN341	Software Development With Oracle
INN342	Enterprise Data Mining and Data Analysis
INN345	Mobile Devices
INN346	Enterprise 2.0
INN347	Web 2.0 Applications
INN350	Internet Protocols and Services
INN351	Unix Network Administration
INN352	Network Planning
INN353	Wireless and Mobile Networks
INN355	Cryptology and Protocols
INN365	Systems Programming
INN370	Software Development
INN371	Data Structures and Algorithms
INN372	Agile Software Development
INN373	Web Application Development
INN374	Enterprise Software Architecture
INN380	Games Project

INN381	Modelling and Animation Techniques	INN701	Advanced Research Methodologies
INN382	Real Time Rendering Techniques	INN281	Advanced Game Design
INN385	Multimedia Systems	INS040	Professional Experience (Postgraduate)
INN386	Advanced Multimedia Systems	INS450	CCNA 1 and 2 Network Fundamentals and Routing
INN500	IT Project Management		
INN530	Web Content Reliability	INS451	CCNA 3 and 4 Lan Switching
INN531	Information Services	INS452	CCNP1: Building Scalable Internetworks
INN532	Information Literacy Education	INS453	CCNP 2: Building Multi Layered Switched Networks
INN533	Information Organisation		
INN540	User Experience	INS454	CCNP3: Building Multi Layered Switched Networks
INN545	Introduction to Health Technology		
INN546	Major Issues in Health Technology	INS455	CCNP4: Optimising Converged Networks
INN550	Computer Forensics		
INN570	Internationalisation of Software		
INN600	Advanced Readings 1		
INN601	Advanced Readings 2		
INN602	Advanced Readings 3		
INN605	Advanced Research 1		
INN606	Advanced Research 2		
INN607	Advanced Research 3		
INN610	Case Studies in Enterprise Systems		
INN630	Evidence Based Practice		
INN631-1	Executive Coaching		
INN631-2	Executive Coaching		
INN631-3	Executive Coaching		
INN631-4	Executive Coaching		
INN631-5	Executive Coaching		
INN631-6	Executive Coaching		
INN632-1	Professional Practice		
INN632-2	Professional Practice		
INN632-3	Professional Practice		
INN632-4	Professional Practice		
INN632-5	Professional Practice		
INN632-6	Professional Practice		
INN650	Advanced Network Management		
INN651	Security Technologies		
INN652	Advanced Cryptology		
INN690	Minor Project 1		
INN691	Minor Project 2		
INN692	Minor Project 3		
INN693	Project		
INN694-1	Project 1		
INN694-2	Project		
INN695	Major Project		
INN696-1	Major Project 1		
INN696-2	Major Project 2		
INN700	Introduction To Research		

Graduate Certificate in Information Technology (IT85)

Year offered: 2009
Admissions: Yes
Course duration (part-time): 1 year
Total credit points: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Ernest Foo

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 IT, 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:

â¢ No Major
â¢ Software Architecture
â¢ Network Management
â¢ Enterprise Systems
â¢ Games Production
â¢ Games Design
â¢ Security
â¢ Library and Information Science
â¢ Information Management
â¢ Digital Environments
â¢ Executive Information Practice

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.

Special entry requirements

Executive Information Practice:
This major contains core units from MBA and as such must also meet the MBA entry requirements:
- Demonstrate comtency in the English language
- Have a GMAT score of at least 500
- Have at least three years work experience
- At least 10 points from at least two of the three categories
- prior work experience, academic achievement and management aptitude
- For further information, including details regarding the allocation of points, please see refer to the table at: http://www.bgsb.qut.edu.au/study/entryreq/index.jsp

Entry Requirements

To be eligible for this program, students must meet one of the following criteria:

â¢ the Australian equivalent of a bachelorâs degree in any discipline with a grade point average of at least 4.5 (on a 7-point scale)
OR
â¢ 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.

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:
â¢ Students are required to complete 48 credit points of units.
â¢ 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 Brisbane Graduate School of Business (BGSB) must meet the MBA entry requirements. Please see the B G S B w e b s i t e http://www.bgsb.qut.edu.au/study/mba/mbacourses/ for further information.

Further Information

For further information contact the course coordinator Ernest Foo on enquiry.scitech@qut.edu.au or call 3138 2782

IT85 - Graduate Certificate In Information Technology

Major Study Areas
Students choose one of the following majors (see Major option list):
No Major
Software Architecture
Network Management
Enterprise Systems
Games Production
Games Design
Security
Executive Information Practice
Library and Information Science

Information Management
Digital Environments

IT85 - Major Options

A Major block has 84 credit points plus a 48 credit point Elective block

No Major

INNXXX	*Any IT postgraduate units to the total of 48 credit points

Software Architecture

Any four units from:

INN371	Data Structures and Algorithms
INN372	Agile Software Development
INN374	Enterprise Software Architecture
INN570	Internationalisation of Software
INN500	IT Project Management
INN370	Software Development

Network Management

Any four units from:

INN350	Internet Protocols and Services
INN351	Unix Network Administration
INN352	Network Planning
INN650	Advanced Network Management
INN500	IT Project Management

Enterprise Systems

Any 4 units from:

INN311	Enterprise Systems
INN312	Enterprise Systems Applications
INN374	Enterprise Software Architecture
INN610	Case Studies in Enterprise Systems
INN500	IT Project Management

Games Production

INN180	Computer Games Studies
INN181	Introduction to Games Production
PLUS	Any 2 units from:
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN500	IT Project Management
INN220	Business Analysis
INN321	Business Process Management

Games Design

INN180	Computer Games Studies
INN280	Fundamentals of Game Design
INN272	Interaction Design
PLUS	Any 1 unit from:

INN500	IT Project Management
INN281	Advanced Game Design
INN600	Advanced Readings 1
INN601	Advanced Readings 2
KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion

Security

INN255	Security
INN651	Security Technologies
PLUS	Any 2 units from:
INN700	Introduction To Research
INN355	Cryptology and Protocols
INN652	Advanced Cryptology
INN550	Computer Forensics
MGN524	Special Topic in Management 1
AYN410	Business Law and Ethics
MGN433	Managing High-Performance Organisations
MGN423	Contemporary Strategic Analysis
GSN440	Risk Management 1
JSN106	Analytical Methods of Intelligence
JSN114	Cybercrime
MAN778	Applications of Discrete Mathematics
LWN139	Privacy Law
LWN125	Electronic Commerce Law
INN690	Minor Project 1
INN691	Minor Project 2
INN692	Minor Project 3
INN694-1	Project 1
INN694-2	Project
INN696-1	Major Project 1
INN696-2	Major Project 2
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3
INN605	Advanced Research 1
INN606	Advanced Research 2
INN607	Advanced Research 3

Library and Information Science

INN690	Minor Project 1
PLUS	Any 3 units from:
INN332	Information Retrieval
INN531	Information Services
INN533	Information Organisation
INN333	Information Programs
INN530	Web Content Reliability
INN532	Information Literacy Education

INN632-1	Professional Practice
INN632-2	Professional Practice
INN632-3	Professional Practice
INN632-4	Professional Practice
INN632-6	Professional Practice
INN632-5	Professional Practice
INN330	Information Management
INN331	Management Issues for Information Professionals
INN271	The Web
INN700	Introduction To Research
INN342	Enterprise Data Mining and Data Analysis
INN540	User Experience
INN600	Advanced Readings 1
INN605	Advanced Research 1
CLN601	Cyberlearning: Information and Knowledge in the Digital Age
CLN603	Designing Spaces for Learning
CLN647	Youth, Popular Culture, and Texts
CLN650	Information-Learning Nexus
EDN611	Professional Applications of Research
KCP402	New Media Studies
MDN642	Digital Pedagogies
SPN624	Adult and Professional Learning
INN345	Mobile Devices
INN346	Enterprise 2.0
INN347	Web 2.0 Applications

Information Management

INN330	Information Management
INN335	Information Resources
SPN637	Managing Knowledge in Learning Organisations
PLUS	Any 1 unit from:
INN122	Organisational Databases
INN255	Security
INN220	Business Analysis
INN334	Information Issues and Values
INN345	Mobile Devices
INN346	Enterprise 2.0
INN540	User Experience
INN347	Web 2.0 Applications

Executive Information Practice

INN630	Evidence Based Practice
INN631	Executive Coaching
PLUS	Any 4 units from:
GSN401	Managing in the Global Business Environment
GSN403	Understanding Data

GSN404	Financial Statements Analysis
GSN405	Strategic Management
GSN406	Human Resource Management Issues
GSN407	Business Communication
GSN408	Fundamentals of Marketing Management
GSN409	Organisational Behaviour 1
GSN410	Entrepreneurship
GSN412	Business Law 1
GSN413	Financial Management 1
GSN415	Understanding Leadership
GSN491	Economics in Business 1

Digital Environments

INN345	Mobile Devices
INN346	Enterprise 2.0
INN347	Web 2.0 Applications
INN540	User Experience
INN500	IT Project Management
KCP402	New Media Studies

Postgraduate IT Units

Unit List:

INN101	Impact of IT
INN120	Corporate Systems
INN122	Organisational Databases
INN124	Information Systems Development
INN180	Computer Games Studies
INN181	Introduction to Games Production
INN210	Databases
INN220	Business Analysis
INN221	Technology Management
INN230	Foundations of Information Retrieval
INN250	Computer Architectures and Systems
INN251	Networks
INN255	Security
INN270	Programming
INN271	The Web
INN272	Interaction Design
INN280	Fundamentals of Game Design
INN311	Enterprise Systems
INN312	Enterprise Systems Applications
INN313	Electronic Commerce Site Development
INN320	Business Process Modelling
INN321	Business Process Management
INN322	Information Systems Consulting
INN323	Smart Services
INN330	Information Management
INN331	Management Issues for Information

Code	Title
	Professionals
INN332	Information Retrieval
INN333	Information Programs
INN334	Information Issues and Values
INN335	Information Resources
INN340	Database Design
INN341	Software Development With Oracle
INN342	Enterprise Data Mining and Data Analysis
INN345	Mobile Devices
INN346	Enterprise 2.0
INN347	Web 2.0 Applications
INN350	Internet Protocols and Services
INN351	Unix Network Administration
INN352	Network Planning
INN353	Wireless and Mobile Networks
INN355	Cryptology and Protocols
INN365	Systems Programming
INN370	Software Development
INN371	Data Structures and Algorithms
INN372	Agile Software Development
INN373	Web Application Development
INN374	Enterprise Software Architecture
INN380	Games Project
INN381	Modelling and Animation Techniques
INN382	Real Time Rendering Techniques
INN385	Multimedia Systems
INN386	Advanced Multimedia Systems
INN500	IT Project Management
INN530	Web Content Reliability
INN531	Information Services
INN532	Information Literacy Education
INN533	Information Organisation
INN540	User Experience
INN545	Introduction to Health Technology
INN546	Major Issues in Health Technology
INN550	Computer Forensics
INN570	Internationalisation of Software
INN600	Advanced Readings 1
INN601	Advanced Readings 2
INN602	Advanced Readings 3
INN605	Advanced Research 1
INN606	Advanced Research 2
INN607	Advanced Research 3
INN610	Case Studies in Enterprise Systems
INN630	Evidence Based Practice
INN631-1	Executive Coaching
INN631-2	Executive Coaching
INN631-3	Executive Coaching
INN631-4	Executive Coaching
INN631-5	Executive Coaching
INN631-6	Executive Coaching
INN632-1	Professional Practice
INN632-2	Professional Practice
INN632-3	Professional Practice
INN632-4	Professional Practice
INN632-5	Professional Practice
INN632-6	Professional Practice
INN650	Advanced Network Management
INN651	Security Technologies
INN652	Advanced Cryptology
INN690	Minor Project 1
INN691	Minor Project 2
INN692	Minor Project 3
INN693	Project
INN694-1	Project 1
INN694-2	Project
INN695	Major Project
INN696-1	Major Project 1
INN696-2	Major Project 2
INN700	Introduction To Research
INN701	Advanced Research Methodologies
INN281	Advanced Game Design
INS040	Professional Experience (Postgraduate)
INS450	CCNA 1 and 2 Network Fundamentals and Routing
INS451	CCNA 3 and 4 Lan Switching
INS452	CCNP1: Building Scalable Internetworks
INS453	CCNP 2: Building Multi Layered Switched Networks
INS454	CCNP3: Building Multi Layered Switched Networks
INS455	CCNP4: Optimising Converged Networks

Graduate Certificate in Information Technology (Wireless Games Technology) (IT89)

Year offered: 2009
Admissions: No
Course duration (part-time): 2 semesters or 26 weeks (based on completing 2 units/sem)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Domestic Entry: February and July
Assumed knowledge: See Entry Requirements
Total credit points: 48
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Course Overview

Please note: From 2009, this course is discontinued - please refer to IT85.

The Graduate Certificate in Information Technology consists of four designated units (48 credit points) which highlight career specialisations. Students can complete the program over 26 weeks part-time (based on two subjects per semester).

The GCert IT (Wireless Games Technology) is aimed at developing knowledge and skills in wireless game applications. Assumed skills include familiarity with object oriented programming in Java and/or C++.

Entry Requirements

An approved Bachelor's degree in Information Technology from a recognised tertiary institution with a grade point average of at least 4.5 (7-point scale); OR provide other evidence of such qualifications (for example Recognised Prior Learning) and significant full-time IT work experience, as will satisfy the Dean of Faculty, that the applicant possesses the capacity to pursue the course of study.

International students cannot gain direct entry into this program as it is offered on a part-time basis only.

International Student Entry

International students cannot gain direct entry into this program as it is offered on a part-time basis only.

Course Structure

Students can enrol directly in the Master of IT (IT Graduates) and gain credit for one or more graduate certificate awards while completing the program. They may exit the course with a graduate certificate (48 credit points) and/or a graduate diploma (96 credit points).

International students cannot gain direct entry to Graduate Certificates in IT as they are currently only available as part of the IT40 Masters program or as an exit point.

Graduate Certificates are offered part-time only.

Further Information

For further information contact the course coordinator Dr Ernest Foo on fit.enquiry@qut.edu.au or visit www.fit.qut.edu.au/courses/postgradcourse.

Graduate Certificate in Information Technology (Computer Networks) (IT90)

Year offered: 2009
Admissions: No
Course duration (part-time): 2 semesters or 26 weeks (based on completing 2 units/sem)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Assumed knowledge: See Entry Requirements
Total credit points: 48
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Course Overview

Please note: From 2009, this course is discontinued - please refer to IT85.

The Graduate Certificate in Information Technology (Computer Networks) (IT90) is designed for a career in network planning and administration.

Students can complete the program over 26 weeks part-time (based on two subjects per semester).

Entry Requirements

Applicants must have a bachelors degree in Information Technology with a grade point average of at least 4.5 (7-point scale) OR provide other evidence of such qualifications and significant full-time Information Technology work experience as will satisfy the Dean of Faculty that the applicant possesses the capacity to pursue the course of study.

Assumed skills: Foundation level study of the principles of modern networking.

International Student Entry

International students cannot gain direct entry into this program as it is offered on a part-time basis only.

Course Structure

Students can enrol directly in the Master of IT (IT Graduates) and gain credit for one or more graduate certificate awards while completing the program. They may exit the course with a graduate certificate (48 credit points) and/or a graduate diploma (96 credit points).

International students cannot gain direct entry to Graduate Certificates in IT as they are currently only available as part of the IT40 Masters program or as an exit point.

The programs are offered part-time only.

Further information

For further information contact the course coordinator Dr Ernest Foo on enquiry.scitech@qut.edu.au or visit www.scitech.qut.edu.au/study/postgrad/

Graduate Certificate in Information Technology (Information Security) (IT92)

Year offered: 2009
Admissions: Yes
Course duration (part-time): 2 semesters or 26 weeks (based on completing 2 units/sem)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Assumed knowledge: See entry requirements
Total credit points: 48
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Course Overview

Please note: From 2009, this course is discontinued - please refer to IT85.

The Graduate Certificate in Information Technology consists of four designated units (48 credit points) which highlight career specialisations. Students can complete the program over 26 weeks part time (based on undertaking two subjects per semester).

GCert IT (Information Security)are designed to provide you with training and a strong understanding of security-related issues in information technology systems. You learn about security problems encountered in computing systems, and explore measures that can be used to secure these systems. An information security background is not necessary for entry to this module.

Entry Requirements

An approved Bachelor's degree in Information Technology from a recognised tertiary institution with a grade point average of at least 4.5 (7-point scale); OR provide other evidence of such qualifications (for example Recognised Prior Learning) and significant full-time IT work experience, as will satisfy the Dean of Faculty, that the applicant possesses the capacity to pursue the course of study.

Assumed skills: Familiarity with principles of modern networking and for ITB646, assumed Maths as specified in ITB646 (see Course Structure).

International students cannot gain direct entry to Graduate Certificates in IT as they are only currently available as part of a Masters program or an exit point.

International Student Entry

International students cannot gain direct entry into this program as it is offered on a part-time basis only.

Course Structure

Students can directly enrol in the Master of IT (IT Graduates)(IT40) and gain credit for one or more graduate certicate awards while completing the program. They may also exit or graduate early from the course upon the successful completion of a graduate certificate (48 credit points) and/or a graduate diploma (96 credit points).

Further Information

For further information contact the course coordinator Dr Ernest Foo on enquiry.scitech@qut.edu.au or visit www.scitech.qut.edu.au/study/postgrad/

Potential Careers:

Data Communications Specialist, Internet Professional, Network Administrator, Network Manager.

Graduate Certificate in Information Technology (Enterprise Wide Software) (IT93)

Year offered: 2009
Admissions: No
Course duration (part-time): 2 semesters or 26 weeks (based on completing 2 units/sem)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Domestic Entry: February and July
Assumed knowledge: See Entry Requirements
Total credit points: 48
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Course Overview

Please note: From 2009, this course is discontinued - please refer to IT85.

The Graduate Certificate in Information Technology consists of four designated units (48 credit points) which highlight career specialisations. GCert IT (EWS)is for students who wish to take advantage of the programming, administration and planning opportunities offered by enterprise wide system environments.

Entry Requirements

An approved Bachelor's degree in Information Technology from a recognised tertiary institution with a grade point average of at least 4.5 (7-point scale); OR provide other evidence of such qualifications (for example Recognised Prior Learning) and significant full-time IT work experience, as will satisfy the Dean of Faculty, that the applicant possesses the capacity to pursue the course of study.

Assumed skills: Familiarity with concepts of enterprise architecture or enterprise modelling.

International students cannot gain direct entry to Graduate Certificates in IT as they are only currently available as part of a Masters program or an exit point.

International Student Entry

International students cannot gain direct entry into this program as it is offered on a part-time basis only.

Course Structure

Students can use a graduate certificate in IT to articulate or gain credit towards a Graduate Diploma and/or Masters in IT award.

Alternatively, applicants may directly enrol in the Master of IT (IT Graduates)(IT40) and gain credit for one or more graduate certicate awards while completing the program. They may also exit or graduate early from the course upon the successful completion of a graduate certificate (48 credit points) and/or a graduate diploma (96 credit points).

Further Information

For further information contact the course coordinator Dr Ernest Foo on enquiry.scitech@qut.edu.au or visit www.scitech.qut.edu.au/study/postgrad/

Graduate Certificate in Information Technology (Electronic Commerce) (IT94)

Year offered: 2009
Admissions: No
Course duration (part-time): 2 semesters or 26 weeks (based on completing 2 units/sem)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Domestic Entry: February and July
Assumed knowledge: See Entry Requirements
Total credit points: 48
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Course Overview

Please note: From 2009, this course is discontinued - please refer to IT85.

The Graduate Certificate in Information Technology consists of four designated units (48 credit points) which highlight career specialisations.

The Graduate Certificate in Information Technology (Electronic Commerce) (IT94) provides the knowledge and skills necessary for employment in mainstream e-commerce application development.

Entry Requirements

An approved Bachelor's degree in Information Technology from a recognised tertiary institution with a grade point average of at least 4.5 (7-point scale); OR provide other evidence of such qualifications (for example Recognised Prior Learning) and significant full-time IT work experience, as will satisfy the Dean of Faculty, that the applicant possesses the capacity to pursue the course of study.

Assumed skills: Familiarity with object oriented concepts, some programming in modern languages and relational databases.

International students cannot gain direct entry to Graduate Certificates in IT as they are only currently available as part of a Masters program or an exit point.

International Student Entry

International students cannot gain direct entry into this program as it is offered on a part-time basis only.

Course Structure

Students can directly enrol in the Master of IT (IT Graduates)(IT40) and gain credit for one or more graduate certicate awards while completing the program. They may also exit or graduate early from the course upon the successful completion of a graduate certificate (48 credit points) and/or a graduate diploma (96 credit points).

Further Information

For further information contact the course coordinator Dr Ernest Foo on enquiry.scitech@qut.edu.au or visit

Graduate Certificate in Information Technology (Project) (IT95)

Year offered: 2009
Admissions: Yes
Course duration (part-time): 2 semesters or 26 weeks (based on completing 2 units/sem)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Domestic Entry: February and July
Assumed knowledge: See Entry Requirements
Total credit points: 48
Course coordinator: Dr Hamish Bentley
Campus: Gardens Point

Entry Requirements

Please note: From 2009, this course is discontinued - please refer to IT85.

An approved Bachelor degree in Information Technology from a recognised tertiary institution with a grade point average of at least 4.5 (7-point scale); OR provide other evidence of such qualifications (for example Recognised Prior Learning) and significant full-time IT work experience, as will satisfy the Dean of Faculty, that the applicant possesses the capacity to pursue the course of study.

Assumed skills: Previous study at postgraduate level. Previous research methodology study recommended.

International students cannot gain direct entry to Graduate Certificates in IT as they are only currently available as part of a Masters program or an exit point.

International Student Entry

International students cannot gain direct entry into this program as it is offered on a part-time basis only.

Articulation

Students can directly enrol in the Master of IT (IT Graduates)(IT40) and gain credit for one or more graduate certicate awards while completing the program. They may also exit or graduate early from the course upon the successful completion of a graduate certificate (48 credit points) and/or a graduate diploma (96 credit points).

Further Information

For further information contact the course coordinator Dr Ernest Foo on enquiry.scitech@qut.edu.au or visit www.scitech.qut.edu.au/study/postgrad/

Potential Careers:

Data Communications Specialist, Internet Professional, Network Administrator, Network Manager, Programmer, Software Engineer, Systems Analyst, Systems Manager, Systems Programmer.

Graduate Certificate in Information Technology (Generic) (IT97)

Year offered: 2009
Admissions: No
Course duration (full-time): 1 semester
Course duration (part-time): 2 semesters
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Domestic Entry: February and July
Total credit points: 48
Course coordinator: Dr Ernest Foo
Campus: Gardens Point and External

IT97 is an exit option only

IT97 Graduate Certificate in IT	
ITN272	Information Technology Project Management
AND	Three of the following Basic units:
ITN200	Database Systems
ITN201	Enterprise Architectures
ITN701	Networks and Systems
OPTIONAL	One of the following Basic units:
ITN700	Programming Principles
ITB001	Problem Solving and Programming

Potential Careers:

Data Communications Specialist, Internet Professional, Network Administrator, Network Manager, Programmer, Software Engineer, Systems Analyst, Systems Manager.

Graduate Certificate in Information Technology (Multimedia) (IT98)

Year offered: 2009
Admissions: No
Course duration (part-time): 2 semesters or 26 weeks (based on completing 2 units/sem)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Domestic Entry: February and July
Assumed knowledge: See Entry Requirements
Total credit points: 48
Course coordinator: Dr Ernest Foo
Campus: Gardens Point

Course Overview

Please note: From 2009, this course is discontinued - please refer to IT85.

The Graduate Certificate in Information Technology consists of four designated units (48 credit points) which highlight career specialisations.

GCert IT (Multimedia)offers the opportunity to specialise in interface design, with skills in multimedia solutions.

Entry Requirements

An approved Bachelor's degree in Information Technology from a recognised tertiary institution with a grade point average of at least 4.5 (7-point scale); OR provide other evidence of such qualifications (for example Recognised Prior Learning) and significant full-time IT work experience, as will satisfy the Dean of Faculty, that the applicant possesses the capacity to pursue the course of study.

Assumed skills: Familiarity with programming and database.

International students cannot gain direct entry to Graduate Certificates in IT as they are only currently available as part of a Masters program or an exit point.

International Student Entry

International students cannot gain direct entry into this program as it is offered on a part-time basis only.

Course Structure

Students can directly enrol in the Master of IT (IT Graduates)(IT40) and gain credit for one or more graduate certicate awards while completing the program. They may also exit or graduate early from the course upon the successful completion of a graduate certificate (48 credit points) and/or a graduate diploma (96 credit points).

Further Information

For further information contact the course coordinator Dr Ernest Foo on enquiry.scitech@qut.edu.au or www.scitech.qut.edu.au/study/postgrad/

Graduate Certificate in Information Technology (Component Software and Web Services) (IT99)

Year offered: 2009
Admissions: No
Course duration (part-time): 2 semesters or 26 weeks (based on completing 2 units/sem)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Domestic Entry: February and July
Assumed knowledge: See Entry Requirements
Total credit points: 48
Course coordinator: Ernest Foo
Campus: Gardens Point

Course Overview

Please note: From 2009, this course is discontinued - please refer to IT85.

The Graduate Certificate in Information Technology consists of four designated units (48 credit points) which highlight career specialisations. The GCert IT (Component Software and Web Services) provides a firm basis for a career in web applications technology across a variety of platforms.

Entry Requirements

An approved Bachelor's degree in Information Technology from a recognised tertiary institution with a grade point average of at least 4.5 (7-point scale); OR provide other evidence of such qualifications (for example Recognised Prior Learning) and significant full-time IT work experience, as will satisfy the Dean of Faculty, that the applicant possesses the capacity to pursue the course of study.

Assumed skills: Programming skills at non-elementary level, including OO concepts, basic computer security, analysis skills (eg software engineering, systems analysis or enterprise modelling), relational database.

International students cannot gain direct entry to Graduate Certificates in IT as they are only currently available as part of a Masters program or an exit point.

International Student Entry

International students cannot gain direct entry into this program as it is offered on a part-time basis only.

Course Structure

Studets can directly enrol in the Master of IT (IT Graduates)(IT40) and gain credit for one or more graduate certicate awards while completing the program. They may also exit or graduate early from the course upon the successful completion of a graduate certificate (48 credit points) and/or a graduate diploma (96 credit points).

Further Information

For further information contact the course coordinator Dr Ernest Foo on enquiry.scitech@qut.edu.au or visit www.scitech.qut.edu.au/study/postgrad/

Bachelor of Applied Science/Bachelor of Education (Secondary) (IX02)

Year offered: 2009
Admissions: Yes
CRICOS code: 020322E
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,641 (indicative) per semester
International Fees (per semester): 2009: $10,750 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 409112
Past rank cut-off: 75
Past OP cut-off: 13
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 432
Standard credit points per full-time semester: 48 (semesters 1, 6-8), 60 (semesters 2-5)
Course coordinator: Dr Perry Hartfield (Science); Dr Mal Shield (Secondary)
Discipline coordinator: Dr Perry Hartfield (Biochemistry); Dr Marion Bateson (Biotechnology); Dr Robert Johnson (Chemistry); Dr Ian Williamson (Ecology); Dr Robin Thwaites (Environmental Science); Dr Gary Huftile (Geoscience); Dr Dann Mallet (Mathematics); Dr Christine Knox (Microbiology); Dr Greg Michael (Physics)
Campus: Gardens Point and Kelvin Grove

Career Opportunities

The Bachelor of Applied Science allows multidisciplinary programs of study that not only help you position yourself within the broad range of science disciplines but also qualifies you as a competent professional in your chosen field. You are equipped to work as a science professional or undertake research after graduation if you desire.

The Bachelor of Education (Secondary) prepares you to teach in two curriculum areas in secondary school. The science majors that are most relevant to students intending to follow a career in secondary school teaching are Chemistry, Ecology, Geoscience, Mathematics or Physics.

Recommended Study

At least one of the sciences. For the majors in biochemistry, biotechnology and microbiology - Biological Science and Chemistry are recommended; for the major in physics - Maths C is recommended.

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.

Professional Recognition

Graduates are eligible for registration as teachers in Queensland through the Queensland College of Teachers. Graduates looking for employment in other parts of Australia and overseas may be required to meet additional conditions.

Graduates will satisfy the requirements for membership of the relevant professional body for their chosen science major. See the Bachelor of Applied Science (SC01) course for details.

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 bluecard.qut.com.

Contact Details

Science Coordinator
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Discipline Coordinators

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Mathematics
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Email: dg.mallet@qut.edu.au

Microbiology
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Phone: +61 7 3138 2301
Email: c.knox@qut.edu.au

Physics
Dr Greg Michael
Phone: +61 7 3138 1584
Email: g.michael@qut.edu.au top

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, portfolios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Computing Requirement

The increased and more creative use of online teaching technology in this degree requires that you have access to suitable computer facilities with a minimum equivalent of a Pentium 3 processor, 56k modem and internet access.

Course structure - Major in Biochemistry

Year 1, Semester 1	
SCB110	Science Concepts and Global Systems

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications
SCB222	Exploration of the Universe

Year 2, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation

Year 2, Semester 2	
LQB481	Biochemical Pathways and Metabolism
LQB483	Molecular Biology Techniques
LSB608	Protein Science
	Science Elective (See list)

Year 3, Semester 1	
LQB581	Functional Biochemistry
LQB582	Biomedical Research Technologies
LQB583	Genetic Research Technology
	Science Elective (See list)

Course structure - Major in Biotechnology

Year 1, Semester 1	
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications
SCB222	Exploration of the Universe

Year 2, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation

Left column

LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics
	Science Elective (See list)
	Science Elective (See list)

Year 3, Semester 1

LQB582	Biomedical Research Technologies
LQB583	Genetic Research Technology
LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation

Course structure - Major in Chemistry

Year 1, Semester 1

SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

MAB100	Mathematical Sciences 1A
SCB121	Chemistry 2
SCB123	Physical Science Applications
SCB131	Experimental Chemistry
SCB222	Exploration of the Universe

Year 2, Semester 1

PQB312	Analytical Chemistry For Scientists and Technologists
PQB331	Structure and Bonding

Year 2, Semester 2

PQB401	Reaction Kinetics, Thermodynamics and Mechanisms
PQB442	Chemical Spectroscopy
PCB634	Organometallic and Coordination Chemistry
	Science Elective (See list)

Year 3, Semester 1

PQB502	Materials Chemistry and Characterisation
PQB513	Instrumental Analysis
PQB531	Organic Mechanisms and Synthesis
	Science Elective (See list)

Course structure - Major in Ecology

Year 1, Semester 1

SCB110	Science Concepts and Global Systems

Right column

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

NQB201	Planet Earth
NQB202	History of Life on Earth
NQB422	Genetics and Evolution
SCB120	Plant and Animal Physiology
SCB222	Exploration of the Universe

Year 2, Semester 1

NQB321	Ecology
NQB322	Invertebrate Biology

Year 2, Semester 2

NQB421	Experimental Design
NRB611	Conservation Biology
	Plus either
SCB122	Cell and Molecular Biology
	Or
SCB123	Physical Science Applications
	Science Elective (See list)

Year 3, Semester 1

NQB502	Field Mapping and Monitoring of Natural Resources
NQB521	Population Genetics and Molecular Ecology
NQB523	Population Management
	Science Elective (See list)

Course structure - Major in Environmental Science

Year 1, Semester 1

SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

NQB201	Planet Earth
NQB202	History of Life on Earth
SCB120	Plant and Animal Physiology
SCB123	Physical Science Applications
SCB222	Exploration of the Universe

Year 2, Semester 1

| NQB302 | Earth Surface Systems |
| NQB321 | Ecology |

Year 2, Semester 2

NQB403	Soils and the Environment
NQB421	Experimental Design
NRB600	Sustainable Environmental Management
	Science Elective (See list)

Year 3, Semester 1

NQB501	Environmental Modelling
NQB502	Field Mapping and Monitoring of Natural Resources
NQB503	Spatial Analysis of Environmental Systems
	Science Elective (See list)

Course structure - Major in Geoscience

Year 1, Semester 1

SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

NQB201	Planet Earth
NQB202	History of Life on Earth
SCB120	Plant and Animal Physiology
SCB123	Physical Science Applications
SCB222	Exploration of the Universe

Year 2, Semester 1

| NQB311 | Mineralogy |
| NQB314 | Sedimentary Geology |

Year 2, Semester 2

NQB411	Petrology of Igneous and Metamorphic Rocks
NQB412	Structural Geology and Field Methods
NRB633	Hydrogeology
	Science Elective (See list)

Year 3, Semester 1

NQB502	Field Mapping and Monitoring of Natural Resources
NQB503	Spatial Analysis of Environmental Systems
NQB513	Geophysics
	Science Elective (See list)

Course structure - Major in Mathematics (WITH Maths C

from Senior)

WITH GENERAL SCIENCE AS A SECOND TEACHING AREA

Year 1, Semester 1

MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1

Year 1, Semester 2

MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB220	Computational Mathematics 1
SCB112	Cellular Basis of Life
SCB222	Exploration of the Universe

Year 2, Semester 1

| MAB311 | Advanced Calculus |
| MAB315 | Operations Research 2 |

Year 2, Semester 2

MAB625	Operations Research 3B
	Plus either
MAB414	Applied Statistics 2
	Or
MAB422	Mathematical Modelling
	Plus select ONE unit from the following:
MAB313	Mathematics of Finance
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB422	Mathematical Modelling
MAB480	Introduction to Scientific Computation
	Science Elective (See list)

Year 3, Semester 1

	Select THREE units from the following:
MAB521	Applied Mathematics 3
MAB525	Operations Research 3A
MAB533	Statistical Techniques
MAB672	Advanced Mathematical Modelling
	null

Course structure - Major in Mathematics (WITHOUT Maths C)

WITH GENERAL SCIENCE AS A SECOND TEACHING AREA

Year 1, Semester 1

| MAB100 | Mathematical Sciences 1A |

MAB101	Statistical Data Analysis 1
SCB110	Science Concepts and Global Systems
SCB111	null

Year 1, Semester 2

MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB220	Computational Mathematics 1
SCB222	Exploration of the Universe

Year 2, Semester 1

| MAB311 | Advanced Calculus |
| MAB315 | Operations Research 2 |

Year 2, Semester 2

MAB625	Operations Research 3B
	Plus either
MAB414	Applied Statistics 2
	Or
MAB422	Mathematical Modelling
	Plus select ONE unit from the following:
MAB313	Mathematics of Finance
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB422	Mathematical Modelling
MAB480	Introduction to Scientific Computation
	Science Elective (See list)

Year 3, Semester 1

SCB112	Cellular Basis of Life
	Plus select THREE units from the following:
MAB521	Applied Mathematics 3
MAB525	Operations Research 3A
MAB533	Statistical Techniques
MAB672	Advanced Mathematical Modelling

Course structure - Major in Microbiology

Year 1, Semester 1

SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

| SCB120 | Plant and Animal Physiology |
| SCB121 | Chemistry 2 |

SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications
SCB222	Exploration of the Universe

Year 2, Semester 1

| LQB381 | Biochemistry: Structure and Function |
| LQB386 | Microbial Structure and Function |

Year 2, Semester 2

LQB483	Molecular Biology Techniques
LQB486	Clinical Microbiology 1
LSB628	Food Microbiology
	Science Elective (See list)

Year 3, Semester 1

LQB586	Clinical Microbiology 2
LQB587	Applied Microbiology 1: Water, Air and Soil
	Either
LQB582	Biomedical Research Technologies
	Or
LQB583	null
	Science Elective (See list)

Course structure - Major in Physics (WITH Maths C from Senior)

WITH GENERAL SCIENCE AS A SECOND TEACHING AREA

Year 1, Semester 1

MAB111	Mathematical Sciences 1B
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

MAB112	Mathematical Sciences 1C
MAB220	Computational Mathematics 1
PQB250	Mechanics and Electromagnetism
PQB251	Waves and Optics
SCB222	Exploration of the Universe

Year 2, Semester 1

| MAB311 | Advanced Calculus |
| PQB350 | Thermodynamics of Solids and Gases |

Year 2, Semester 2

PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation
PCB665	Physics 3
	Science Elective (See list)

Year 3, Semester 1

PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques
PQB651	Experimental Physics
	Science Elective (See list)

WITH MATHEMATICS AS A SECOND TEACHING AREA

Year 1, Semester 2

MAB111	Mathematical Sciences 1B
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

MAB112	Mathematical Sciences 1C
MAB220	Computational Mathematics 1
PQB250	Mechanics and Electromagnetism
PQB251	Waves and Optics
	Plus either
MAB101	Statistical Data Analysis 1
	Or
MAB210	Statistical Modelling 1

Year 2, Semester 1

| MAB311 | Advanced Calculus |
| PQB350 | Thermodynamics of Solids and Gases |

Year 2, Semester 2

PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation
PCB665	Physics 3
	Plus select TWO units from the following:
MAB210	Statistical Modelling 1
MAB313	Mathematics of Finance
MAB413	Differential Equations
MAB422	Mathematical Modelling
MAB480	Introduction to Scientific Computation

Year 3, Semester 1

MAB312	Linear Algebra
PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques
PQB651	Experimental Physics

Course structure - Major in Physics (WITHOUT Maths C from Senior)

WITH GENERAL SCIENCE AS A SECOND TEACHING AREA

Year 1, Semester 1

MAB100	Mathematical Sciences 1A
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
PQB250	Mechanics and Electromagnetism
PQB251	Waves and Optics
SCB222	Exploration of the Universe

Year 2, Semester 1

| MAB311 | Advanced Calculus |
| PQB350 | Thermodynamics of Solids and Gases |

Year 2, Semester 2

PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation
PCB665	Physics 3
	Science Elective (See list)

Year 3, Semester 1

PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques
PQB651	Experimental Physics
	Science Elective (See list)

WITH MATHEMATICS AS A SECOND TEACHING AREA

Year 1, Semester 1

MAB100	Mathematical Sciences 1A
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB220	Computational Mathematics 1
PQB250	Mechanics and Electromagnetism
PQB251	Waves and Optics

Year 2, Semester 1

| MAB311 | Advanced Calculus |
| PQB350 | Thermodynamics of Solids and Gases |

Year 2, Semester 2

PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation
PCB665	Physics 3

Plus select TWO units from the following:

MAB210	Statistical Modelling 1
MAB313	Mathematics of Finance
MAB413	Differential Equations
MAB422	Mathematical Modelling
MAB480	Introduction to Scientific Computation

Year 3, Semester 1

PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques
PQB651	Experimental Physics
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB312	Linear Algebra

Second Teaching Area - General Science

SCB120	Plant and Animal Physiology
	Or
SCB222	Exploration of the Universe
	* SCB120 and SCB222 are alternative units for Geoscience Major
MDB454	Science, Technology and Society

Science Electives

Select TWO units that you have not already done from the following:

Semester 1 Units:

NQB321	Ecology
NQB322	Invertebrate Biology
NQB323	Plant Biology
SCB121	Chemistry 2

Semester 2 Units:

NQB201	Planet Earth
NQB202	History of Life on Earth
NQB403	Soils and the Environment
NQB423	Vertebrate Biology
PQB250	Mechanics and Electromagnetism
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

List 1: Curriculum Studies 1X & 1Y

Prerequisite: Normally minimum of 24 credit points of relevant discipline. Students undertaking a double Science major will undertake an education elective in addition to MDB031.

MDB021	Mathematics Curriculum Studies 1
MDB031	Science Education Curriculum Studies 1

List 2: Curriculum Studies 2X & 2Y

Prerequisites: Curriculum Studies 1X & 1Y

MDB010	Biology Curriculum Studies 2
MDB013	Chemistry Curriculum Studies 2
MDB019	Earth Science Curriculum Studies 2
MDB022	Mathematics Curriculum Studies 2
MDB025	Physics Curriculum Studies 2
MDB028	Science Curriculum Studies 2

List 3: Curriculum Studies 3X & 3Y

Prerequisites: Curriculum Studies 2X & 2Y. Students undertaking a double Science major will undertake an education elective in addition to MDB033.

MDB023	Mathematics Curriculum Studies 3
MDB033	Science Education Curriculum Studies 3

Potential Careers:

Actuary, Analytical Chemist, Astrophysicist, Biochemist, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Database Manager, Ecologist, Environmental Scientist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, Industrial Chemist, Laboratory Technician (Chemistry), Marine Scientist, Mathematician, Medical Biotechnologist, Medical Physicist, Microbiologist, Natural Resource Scientist, Physicist, Plant Biotechnologist, Population Ecologist, Programmer, Quantitative Analyst, Statistician, Virologist.

Bachelor of Applied Science/Bachelor of Education (Primary) (IX14)

Year offered: 2009
Admissions: Yes
CRICOS code: 037540M
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $2,888 (indicative) per semester
International Fees (per semester): 2009: $10,750 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 409142
Past rank cut-off: 75
Past OP cut-off: 13
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 384
Standard credit points per full-time semester: 48
Course coordinator: Dr Perry Hartfield (Science): Contact Education Student Affairs Section 3138 3947, or educationenq@qut.edu.au
Discipline coordinator: Education Course Coordintor Dr Mary Ryan. Science Discipline Coordinators: Dr Perry Hartfield (Biochemistry); Dr Marion Bateson (Biotechnology); Dr Robert Johnson (Chemistry); Dr Ian Williamson (Ecology); Dr Robin Thwaites (Environmental Science); Dr Gary Huftile (Geoscience); Dr Scott McCue (Mathematics); Dr Christine Knox (Microbiology); Dr Greg Michael (Physics)
Campus: Gardens Point and Kelvin Grove

Career Opportunities

The Bachelor of Applied Science allows multidisciplinary programs of study that not only help you position yourself within the broad range of science disciplines but also qualifies you as a competent professional in your chosen field. You will be equipped to work as a science professional or undertake research after graduation if you desire.

The Bachelor of Education (Primary) prepares you to teach at all levels of primary school. Students may also complete a discipline/content studies major in one of the key learning areas of the Queensland school curriculum.

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.

Professional Recognition

Graduates are eligible for registration as teachers in Queensland through the Queensland College of Teachers. Graduates looking for employment in other parts of Australia and overseas may be required to meet additional conditions.

Graduates will satisfy the requirements for membership of the relevant professional body for their chosen science major. See the Bachelor of Applied Science course for details.

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 12 weeks for the Commission to issue the Card. The application form is available at bluecard.qut.com.

Contact Details

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Microbiology
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Email: c.knox@qut.edu.au

Physics
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Email: g.michael@qut.edu.au top

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, portfolios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Computing Requirement

The increased and more creative use of online teaching technology in this degree requires that you have access to suitable computer facilities with a minimum equivalent of a Pentium 3 processor, 56k modem and internet access.

Course structure - Major in Biochemistry

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology

Year 2, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
LQB386	Microbial Structure and Function

Year 2, Semester 2	
LQB481	Biochemical Pathways and Metabolism
LQB483	Molecular Biology Techniques
LSB607	Protein Purification

Year 3, Semester 1	
LQB581	Functional Biochemistry
LQB582	Biomedical Research Technologies
LQB583	Genetic Research Technology
	Science Elective

Course structure - Major in Biotechnology

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology

Year 2, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
LQB386	Microbial Structure and Function

Year 2, Semester 2	
LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics
	Plus select ONE unit from the following:
LQB481	Biochemical Pathways and Metabolism
LQB486	Clinical Microbiology 1
LQB488	Medical Physiology 2

LQB489   Plant Physiology and Cell Biology

Year 3, Semester 1
LQB582   Biomedical Research Technologies
LQB583   Genetic Research Technology
LQB584   Medical Cell Biology
LQB585   Plant Genetic Manipulation

Course structure - Major in Chemistry

Year 1, Semester 1
SCB111   Chemistry 1
SCB112   Cellular Basis of Life
          Plus either
MAB101   Statistical Data Analysis 1
          Or
MAB105   Preparatory Mathematics

Year 1, Semester 2
MAB100   Mathematical Sciences 1A
SCB121   Chemistry 2
SCB131   Experimental Chemistry

Year 2, Semester 1
PQB312   Analytical Chemistry For Scientists and Technologists
PQB313   Analytical Chemistry For Industry
PQB331   Structure and Bonding

Year 2, Semester 2
PQB401   Reaction Kinetics, Thermodynamics and Mechanisms
PQB442   Chemical Spectroscopy
PCB634   Organometallic and Coordination Chemistry

Year 3, Semester 1
PQB502   Materials Chemistry and Characterisation
PQB513   Instrumental Analysis
          Plus either
PQB525   Unit Operations
          Or
PQB531   Organic Mechanisms and Synthesis
          Science Elective

Course structure - Major in Ecology

Year 1, Semester 1
SCB110   Science Concepts and Global Systems
SCB112   Cellular Basis of Life
          Plus either
MAB101   Statistical Data Analysis 1
          Or

MAB105   Preparatory Mathematics

Year 1, Semester 2
NQB202   History of Life on Earth
NQB422   Genetics and Evolution
SCB120   Plant and Animal Physiology

Year 2, Semester 1
NQB321   Ecology
SCB111   Chemistry 1
          Either
NQB322   Invertebrate Biology
          Or
NQB323   Plant Biology

Year 2, Semester 2
NQB421   Experimental Design
NRB611   Conservation Biology
          Science Elective

Year 3, Semester 1
NQB502   Field Methods in Natural Resource Sciences
NQB521   Population Genetics and Molecular Ecology
NQB523   Population Management
          Science Elective

Course structure - Major in Environmental Science

Year 1, Semester 1
SCB110   Science Concepts and Global Systems
SCB112   Cellular Basis of Life
          Plus either
MAB101   Statistical Data Analysis 1
          Or
MAB105   Preparatory Mathematics

Year 1, Semester 2
NQB201   Planet Earth
NQB202   History of Life on Earth
SCB120   Plant and Animal Physiology

Year 2, Semester 1
NQB302   Earth Surface Systems
NQB321   Ecology
SCB111   Chemistry 1

Year 2, Semester 2
NQB403   Soils and the Environment
NQB421   Experimental Design
NRB600   Sustainable Environmental Management

Year 3, Semester 1

NQB501	Environmental Modelling
NQB502	Field Methods in Natural Resource Sciences
NQB503	Spatial Analysis of Environmental Systems
	Science Elective

Course structure - Major in Geoscience

Year 1, Semester 1

SCB110	Science Concepts and Global Systems
SCB112	Cellular Basis of Life
	Plus either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

NQB201	Planet Earth
NQB202	History of Life on Earth
SCB222	Exploration of the Universe

Year 2, Semester 1

NQB311	Mineralogy
NQB314	Sedimentary Geology
SCB111	Chemistry 1

Year 2, Semester 2

NQB411	Petrology of Igneous and Metamorphic Rocks
NQB412	Structural Geology and Field Methods
NRB633	Hydrogeology

Year 3, Semester 1

NQB502	Field Methods in Natural Resource Sciences
NQB512	Economic Geology
NQB513	Geophysics
	Science Elective

Course structure - Major in Mathematics (WITH Maths C)

Year 1, Semester 1

MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
SCB110	Science Concepts and Global Systems

Year 1, Semester 2

MAB112	Mathematical Sciences 1C
MAB220	Computational Mathematics 1
SCB111	Chemistry 1

Year 2, Semester 1

| MAB220 | Computational Mathematics 1 |
| MAB311 | Advanced Calculus |

| MAB315 | Operations Research 2 |

Year 2, Semester 2

MAB625	Operations Research 3B
	Plus either
MAB414	Applied Statistics 2
	Or
MAB422	Mathematical Modelling
	Plus select ONE unit from the following:
MAB313	Mathematics of Finance
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB422	Mathematical Modelling
MAB461	Discrete Mathematics
MAB480	Introduction to Scientific Computation

Year 3, Semester 1

SCB112	Cellular Basis of Life
	Plus select THREE units from the following:
MAB521	Applied Mathematics 3
MAB525	Operations Research 3A
MAB533	Statistical Techniques
MAB672	Advanced Mathematical Modelling

Course structure - Major in Mathematics (WITHOUT Maths C)

Year 1, Semester 1

MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
SCB110	Science Concepts and Global Systems

Year 1, Semester 2

MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1

Year 2, Semester 1

MAB220	Computational Mathematics 1
MAB311	Advanced Calculus
MAB315	Operations Research 2

Year 2, Semester 2

MAB625	Operations Research 3B
	Plus either
MAB414	Applied Statistics 2
	Or
MAB422	Mathematical Modelling
	Plus select ONE unit from the following:
MAB313	Mathematics of Finance
MAB413	Differential Equations

MAB414	Applied Statistics 2
MAB422	Mathematical Modelling
MAB461	Discrete Mathematics
MAB480	Introduction to Scientific Computation

	Select ONE unit from the following:
SCB110	Science Concepts and Global Systems
SCB112	Cellular Basis of Life
	Plus select THREE units from the following:
MAB521	Applied Mathematics 3
MAB525	Operations Research 3A
MAB533	Statistical Techniques
MAB672	Advanced Mathematical Modelling

Course structure - Major in Microbiology

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology

Year 2, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
LQB386	Microbial Structure and Function

Year 2, Semester 2

LQB483	Molecular Biology Techniques
LQB486	Clinical Microbiology 1
LSB628	Food Microbiology

Year 3, Semester 1

LQB586	Clinical Microbiology 2
LQB587	Applied Microbiology 1: Water, Air and Soil
	Plus either
LQB582	Biomedical Research Technologies
	Or
LQB583	Genetic Research Technology
	Science Elective

Course structure - Major in Physics

Year 1, Semester 1

SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
	Plus either
MAB100	Mathematical Sciences 1A
	Or
MAB111	Mathematical Sciences 1B
	NOTE: Students without Senior Mathematics C must take MAB120 in Semester 1 and MAB121 in Semester 2

Year 1, Semester 2

MAB112	Mathematical Sciences 1C
PQB250	Mechanics and Electromagnetism
	Plus either
MAB111	Mathematical Sciences 1B
	Or
PQB251	Waves and Optics

Year 2, Semester 1

MAB311	Advanced Calculus
PQB350	Thermodynamics of Solids and Gases
SCB112	Cellular Basis of Life

Year 2, Semester 2

PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation
PCB665	Physics 3

Year 3, Semester 1

PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques
PQB651	Experimental Physics
	Science elective for Physics major (See list)

Course structure - Science Elective for Physics Major

	Students must select units that they have not already taken, and for which they have the appropriate prerequisites:
MAB101	Statistical Data Analysis 1
MAB220	Computational Mathematics 1
MAB312	Linear Algebra
NQB302	Earth Surface Systems
NQB311	Mineralogy
NQB322	Invertebrate Biology
NQB323	Plant Biology
PCB593	Digital Image Processing
PQB360	Global Energy Balance and Climate Change
SCB121	Chemistry 2

Potential Careers:

Actuary, Analytical Chemist, Astrophysicist, Biochemist, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Database Manager, Ecologist, Environmental Scientist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, Industrial Chemist, Laboratory Technician (Chemistry), Marine Scientist, Mathematician, Medical Biotechnologist, Medical Physicist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Physicist, Plant Biotechnologist, Population Ecologist, Programmer, Quantitative Analyst, Statistician, Virologist.

Bachelor of Engineering (Software Engineering) (IX25)

Year offered: 2009
Admissions: No
CRICOS code: 053707D
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,568 (indicative) per semester
International Fees (per semester): 2009: $11,000 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419502
Past rank cut-off: 76
Past OP cut-off: 12
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 384
Standard credit points per full-time semester: 48
Course coordinator: Dr R.Mahalinga-Iyer
Discipline coordinator: Dr Jasmine Banks
Campus: Gardens Point

Course Overview

The course is a collaborative program between the Faculties of Built Environment & 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, including micro, mini and mainframe computer systems in all areas of industry.

Course is under review

The Faculty of Science and Technology is currently reviewing this course structure to continue to meet the needs of students and employers. As a result this program may change in 2009 and is subject to final approval. Further information will be available from August 2008. Please contact enquiry.scitech@qut.edu.au for any enquiries.

Recommended Study

Chemistry, Maths C and Physics

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

Professional accreditation from Engineers Australia and the Australian Computer Society is being sought.

Special course requirements

Students are required to complete 60 days approved industrial experience.

International Student Entry

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

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Further Information

Faculty of Built Environment and Engineering: tel: +61 7 3138 1993, fax: +61 7 3138 1516, email: bee.enquiries@qut.edu.au
Faculty of Science and Technology: tel: +61 7 3138 2782, fax +61 7 3138 2703, email: enquiry.scitech@qut.edu.au

IX25 - Bachelor of Engineering (Software Engineering) - Course structure

Course Structure 2009

The Faculty of Information Technology is currently reviewing this course structure to

continue to meet the needs of students and employers. As a result this program may change in 2009 and is subject to final approval. Further information will be available from August 2008. Please contact fit.enquiry@qut.edu.au for any enquiries.

Year 2 - Semester 1

ENB240	Introduction To Electronics
ENB242	Introduction To Telecommunications
INB251	Networks
MAB233	Engineering Mathematics 3

Year 2 - Semester 2

ENB243	Linear Circuits and Systems
ENB244	Microprocessors and Digital Systems
INB210	Databases
	Select one of:
INB271	The Web
INB272	Interaction Design

Year 3 - Semester 1

ENB350	Real-time Computer-based Systems
ENB354	Introduction To Systems Design
INB370	Software Development
INB371	Data Structures and Algorithms

Year 3 - Semester 2

ENB352	Communication Environments For Embedded Systems
ENB355	Advanced Systems Design
INB301	The Business of IT
INB372	Software Engineering Principles

Year 4 - Semester 1

INB350	Internet Protocols and Services
INB255	Security
INB309-1	Major Project
	OR
BEB801	Project 1
	Elective

Year 4 - Semester 2

BEB701	Work Integrated Learning 1
INB309-2	Major Project
	OR
BEB802	Project 2
	Elective
	Elective

IX25 - Bachelor of Engineering (Software Engineering) - Electives

Students are required to undertake 3 electives as follows: 2 from Electrical Engineering and 1 from Information Technology

Electrical Engineering Electives (2 to be selected)

Any 3rd or 4th year electrical ENB unit approved by the course coordinator.

Information Technology Electives (1 to be selected)

INB365	Systems Programming
INB373	Web Application Development
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques

Or any 3rd or 4th year IT unit approved by the course coordinator.

Potential Careers:

Computer Systems Engineer, Data Communications Specialist, Electrical and Computer Engineer, Electrical Engineer, Software Engineer, Systems Programmer.

Bachelor of Applied Science/Bachelor of Information Technology (IX26)

Year offered: 2009
Admissions: No
CRICOS code: 020327M
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
International Fees (per semester): 2009: $10,750 (indicative) per semester *(subject to annual review)*
QTAC code: 419302
Past rank cut-off: 74
Past OP cut-off: 13
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Course coordinator: Dr Perry Hartfield (Science), Mr Richard Thomas (IT)
Discipline coordinator: Dr Perry Hartfield (Biochemistry); Dr Marion Bateson (Biotechnology); Dr Robert Johnson (Chemistry); Dr Ian Williamson (Ecology); Dr Robin Thwaites (Environmental Science); Dr Emad Kiriakous (Forensic Science); Dr Gary Huftile (Geoscience); Dr Christine Knox (Microbiology); Dr Greg Michael (Physics)
Campus: Gardens Point

Intermediate Level Electives

Intermediate Level Electives	
INB120	Corporate Systems
INB220	Business Analysis
INB255	Security
INB272	Interaction Design
	OR
	an INB300 level unit as approved by the course coordinator

Information Systems Major

Compulsory Units	
INB311	Enterprise Systems
INB340	Database Design
INB220	Business Analysis

IS Elective Units	
INB312	Enterprise Systems Applications
INB342	Enterprise Data Mining
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB320	Business Process Modelling
INB124	Information Systems Development

INB221	Technology Management

Network Systems Major

Compulsory Units	
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB255	Security

Electives	
INB312	Enterprise Systems Applications
INB365	Systems Programming
INB353	Wireless and Mobile Networks
INB355	Cryptology and Protocols

Software Architecture Major

Compulsory Units	
INB340	Database Design
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles

Electives	
	Choose 3 Electives
INB341	Software Development With Oracle
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
INB272	Interaction Design
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB320	Business Process Modelling
INB365	Systems Programming
INB370	Software Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
MAB281	Mathematics for Computer Graphics
	MAB281 is only to be used as a prereq for INB381
	null

Course structure - Major in Biochemistry

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2	
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation

Year 3, Semester 2	
LQB481	Biochemical Pathways and Metabolism
LQB483	Molecular Biology Techniques

Year 4, Semester 1	
LQB581	Functional Biochemistry
LQB582	Biomedical Research Technologies

Year 4, Semester 2	
LQB681	Biochemical Research Skills
LQB682	Protein Biochemistry and Bioengineering

Course structure - Major in Biotechnology

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2	
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation

Year 3, Semester 2	

LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics

Year 4, Semester 1	
	TWO units selected from:
LQB583	Genetic Research Technology
LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation

Year 4, Semester 2	
	TWO units selected from:
LQB682	Protein Biochemistry and Bioengineering
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions

Course structure - Major in Chemistry

Year 1, Semester 1	
SCB111	Chemistry 1
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2	
SCB112	Cellular Basis of Life
SCB121	Chemistry 2

Year 2, Semester 1	
MAB100	Mathematical Sciences 1A
SCB110	Science Concepts and Global Systems

Year 2, Semester 2	
SCB123	Physical Science Applications
SCB131	Experimental Chemistry

Year 3, Semester 1	
PQB312	Analytical Chemistry For Scientists and Technologists
PQB331	Structure and Bonding

Year 3, Semester 2	
PQB401	Reaction Kinetics, Thermodynamics and Mechanisms
PQB442	Chemical Spectroscopy

Year 4, Semester 1	
PQB502	Materials Chemistry and Characterisation
PQB531	Organic Mechanisms and Synthesis

Year 4, Semester 2	
PQB631	Advanced Inorganic Chemistry
PQB642	Chemical Research

Course structure - Major in Ecology

Year 1, Semester 1
| SCB111 | Chemistry 1 |
| SCB112 | Cellular Basis of Life |

Year 1, Semester 2
| SCB120 | Plant and Animal Physiology |
| SCB122 | Cell and Molecular Biology |

Year 2, Semester 1
SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2
| NQB201 | Planet Earth |
| NQB202 | History of Life on Earth |

Year 3, Semester 1
| NQB302 | Earth Surface Systems |
| NQB321 | Ecology |

Year 3, Semester 2
| NQB421 | Experimental Design |
| NQB422 | Genetics and Evolution |

Year 4, Semester 1
| NQB521 | Population Genetics and Molecular Ecology |
| NQB523 | Population Management |

Year 4, Semester 2
| NQB622 | Conservation Biology |
| NQB623 | Ecological Systems |

Course structure - Major in Environmental Science

Year 1, Semester 1
| SCB111 | Chemistry 1 |
| SCB112 | Cellular Basis of Life |

Year 1, Semester 2
| SCB120 | Plant and Animal Physiology |
| SCB121 | Chemistry 2 |

Year 2, Semester 1
SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2
| NQB202 | History of Life on Earth |
| SCB123 | Physical Science Applications |

Year 3, Semester 1
| NQB302 | Earth Surface Systems |
| NQB321 | Ecology |

Year 3, Semester 2
| NQB403 | Soils and the Environment |
| NQB421 | Experimental Design |

Year 4, Semester 1
| NQB501 | Environmental Modelling |
| NQB502 | Field Mapping and Monitoring of Natural Resources |

Year 4, Semester 2
| NQB601 | Sustainable Environmental Management |
| NQB602 | Environmental Chemistry |

Course structure - Major in Forensic Science

Year 1, Semester 1
| SCB111 | Chemistry 1 |
| SCB112 | Cellular Basis of Life |

Year 1, Semester 2
| SCB121 | Chemistry 2 |
| SCB122 | Cell and Molecular Biology |

Year 2, Semester 1
SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2
| SCB123 | Physical Science Applications |
| SCB131 | Experimental Chemistry |

Year 3, Semester 1
| LQB383 | Molecular and Cellular Regulation |
| SCB384 | Forensic Sciences - From Crime Scene to Court |

Year 3, Semester 2
| JSB979 | Forensic Scientific Evidence |
| PQB312 | Analytical Chemistry For Scientists and Technologists |

Year 4, Semester 1
| PQB513 | Instrumental Analysis |

PQB584	Forensic Physical Evidence

Year 4, Semester 2

LQB680	Forensic DNA Profiling
PQB684	Forensic Analysis

Course structure - Major in Geoscience

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

NQB201	Planet Earth
SCB123	Physical Science Applications

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

NQB202	History of Life on Earth
SCB222	Exploration of the Universe

Year 3, Semester 1

NQB311	Mineralogy
NQB314	Sedimentary Geology

Year 3, Semester 2

NQB411	Petrology of Igneous and Metamorphic Rocks
NQB412	Structural Geology and Field Methods

Year 4, Semester 1

NQB502	Field Mapping and Monitoring of Natural Resources
NQB513	Geophysics

Year 4, Semester 2

NQB602	Environmental Chemistry
NQB614	Groundwater Systems

Course structure - Major in Microbiology

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB386	Microbial Structure and Function

Year 3, Semester 2

LQB483	Molecular Biology Techniques
LQB486	Clinical Microbiology 1

Year 4, Semester 1

LQB586	Clinical Microbiology 2
LQB587	Applied Microbiology 1: Water, Air and Soil

Year 4, Semester 2

LQB686	Microbial Technology and Immunology
LQB687	Applied Microbiology 2: Food and Quality Assurance

Course structure - Major in Physics

Year 1, Semester 1

MAB111	Mathematical Sciences 1B
SCB111	Chemistry 1

Year 1, Semester 2

MAB112	Mathematical Sciences 1C
PQB250	Mechanics and Electromagnetism

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
SCB112	Cellular Basis of Life

Year 2, Semester 2

MAB220	Computational Mathematics 1
PQB251	Waves and Optics

Year 3, Semester 1

MAB311	Advanced Calculus
PQB350	Thermodynamics of Solids and Gases

Year 3, Semester 2

PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation

Year 4, Semester 1

| PQB550 | Quantum and Condensed Matter Physics |
| PQB551 | Physical Analytical Techniques |

Year 4, Semester 2
PQB650	Advanced Theoretical Physics
PQB651	Experimental Physics

Minors Unit Sets

You can pick from x of these
ASF001	Australian Studies 1
PYB159	Alcohol & Other Drug Studies
BSD117	Professional Communication and Negotiation
HMB317	Outdoor Education
	There is more

Potential Careers:

Analytical Chemist, Astrophysicist, Biochemist, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Data Communications Specialist, Ecologist, Environmental Scientist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, Industrial Chemist, Laboratory Technician (Chemistry), Marine Scientist, Medical Biotechnologist, Medical Physicist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Network Administrator, Network Manager, Physicist, Plant Biotechnologist, Population Ecologist, Software Engineer, Systems Analyst, Virologist.

Bachelor of Creative Industries / Bachelor of Information Technology (IX27)

Year offered: 2009
Admissions: No
CRICOS code: 059227E
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,332 (indicative) per semester
International Fees (per semester): 2009: $10,000 (indicative) per semester *(subject to annual review)*
QTAC code: 409872
Past rank cut-off: 74
Past OP cut-off: 13
Assumed knowledge: English (4, SA), and for games technology and security majors, Maths B (4, SA), or for all other majors, Maths A, B or C (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or **Total credit points:** 384
Standard credit points per full-time semester: 48
Course coordinator: IT: Mr Richard Thomas; Creative Industries: Head, Undergraduate Studies (ugenq.ci@qut.edu.au)
Campus: Gardens Point and Kelvin Grove

Overview

This four-year program gives you the opportunity to allow your creative side to shine through as it complements your technical information technology skills. The integrated program consists of 16 creative industries units and 16 information technology units so that you will study both creative industries and information technology units in each semester. You will choose one information technology major from business systems engineering, databases, electronic business, games technology, information and knowledge management, information systems, information technology management, intelligent systems, security, network systems, software architecture, or web services and applications.

The Bachelor of Creative Industries emphasises the use of technology through digital media and film production in the interdisciplinary major. You can choose a creative industries Second major that will build complementary skill sets, such as digital media or film, television and screen. Alternatively, you may choose a creative industries area of interest to diversify your IT studies.

Creative Industries Second majors include art and design history; creative and professional writing; dance; digital media, fashion; film, television and screen; interactive and visual design; journalism; media and communication; literary and cultural studies.

Course Update

From semester one, 2009 this course will not be available for commencing students. IX27 will only be available for continuing students. New students - please refer to IX56. Please contact enquiry.scitech@qut.edu.au for any enquiries.

Career Outcomes

The creative industries Second majors in this double degree have been specifically chosen for their relevance to careers in information technology. You will undertake the Bachelor of Creative Industries interdisciplinary major as well as one creative industries second major. Your information technology degree component comprises eight core units and and eight units in your information technology major.

You will learn creative and technical skills within a contextual framework, so you will be well placed to build your career in digital product and new media strategy.

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).

OP Guarantee

The OP Guarantee does not apply to this course.

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Domestic student tuition fee (Dfee) places

Undergraduate domestic full fee places (Dfee) are not available in this course. Tuition fees are only applicable to currently enrolled students who were unable to comply regulations regarding their orignal Commonwealth Supported place (i.e. failure to lodge an eCAF, has consumed of other their Student Learning Entitlement etc.) and who have been invited and accepted to continue as a fee-paying student.

Further Information

For information regarding the IT component of this degree, please contact the Course Coordinator, Mr Richard Thomas

(07)3138 2782 or enquiry.scitech@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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code

IX27 - Bachelor of Creative Industries/Bachelor of Information Technology Course structure

Course Structure 2009

From semester one, 2009 this course will not be available for commencing students. IX27 will only be available for continuing students. New students - please refer to IX56. Please contact enquiry.scitech@qut.edu.au for any enquiries.

Year 1, Semester 1

INB103	Industry Insights
INB250	Systems Architecture
KKB101	Creative Industries: People and Practices
	Creative Industries Faculty Unit

Year 1, Semester 2

INB210	Databases
INB251	Networks
KKB102	Creative Industries: Making Connections
	Creative Industries Faculty Unit

Year 2, Semester 1

INB104	Building IT Systems
	Choose one unit from: Intermediate Level Elective list. This choice will replace ITB008 from 2009 course summary.
	Creative Industries Faculty Unit
	Creative Industries Faculty Unit

Year 2, Semester 2

INB270	Programming
INB271	The Web
	Creative Industries Faculty Unit
	Creative Industries Faculty Unit

Year 3, Semester 1

	IT Major Unit
	IT Major Unit
	Creative Industries Faculty Unit
	Creative Industries Faculty Unit

Year 3, Semester 2

| INB301 | The Business of IT |
| | IT Major Unit |

| | Creative Industries Faculty Unit |
| | Creative Industries Faculty Unit |

Year 4, Semester 1

INB302	Capstone Project
	IT Major Unit
	Creative Industries Faculty Unit
	Creative Industries Elective Unit

Year 4, Semester 2

	IT Major Unit
	IT Major Unit
	Creative Industries Faculty Unit
	Creative Industries Elective Unit

Creative Industries Course Structure

Year 1, Semester 1

KKB101	Creative Industries: People and Practices
KPB150	Foundations of Multi-platform Production
	OR
KVB104	Photomedia and Artistic Practice

Year 1, Semester 2

| KKB102 | Creative Industries: Making Connections |
| KCB103 | Strategic Speech Communication |

Year 2, Semester 1

| KKB221 | Approaching Interdisciplinarity |
| SELECT: | Second major: One First Unit |

Year 2, Semester 2

| KKB222 | Interdisciplinarity in Practice |
| SELECT: | Second major: One Second Unit |

Year 3, Semester 1

| SELECT: | Second major: One Third Unit |
| SELECT: | Second major: One Fourth Unit |

Year 3, Semester 2

| SELECT: | Second major: One Fifth Unit |
| SELECT: | Second major: One Sixth Unit |

Year 4, Semester 1

| SELECT: | Transitions to New Professional Environment Unit |
| SELECT: | Second major: One Seventh Unit |

Year 4, Semester 2

| SELECT: | Transitions to New Professional Environment Unit |
| SELECT: | Second major: One Eighth Unit |

Information Systems Major

Compulsory Units

INB311	Enterprise Systems
INB340	Database Design
INB220	Business Analysis

IS Elective Units

INB312	Enterprise Systems Applications
INB342	Enterprise Data Mining
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB320	Business Process Modelling
INB124	Information Systems Development
INB221	Technology Management

Network Systems Major

Compulsory Units

INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB255	Security

Electives

INB312	Enterprise Systems Applications
INB365	Systems Programming
INB353	Wireless and Mobile Networks
INB355	Cryptology and Protocols

Software Architecture Major

Compulsory Units

INB340	Database Design
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles

Electives

	Choose 3 Electives
INB341	Software Development With Oracle
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
INB272	Interaction Design
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB320	Business Process Modelling
INB365	Systems Programming
INB370	Software Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques

MAB281	Mathematics for Computer Graphics
	MAB281 is only to be used as a prereq for INB381
	null

Creative Industries Second Majors

INSTRUCTIONS FOR SECOND MAJORS/CO-MAJORS

*From 2009 Co-Majors have been renamed Second Majors

Please refer to the following study sequences to plan your program. You must complete 96 credit points (normally eight 12 credit point subjects) from the specified units to achieve a second major or co-major, following semester of offer and unit prerequisites (where applicable) to determine order of enrolment. Any unit(s) that appear in these second major or co-majors and/or minors and are also mandatory elsewhere in your course can not contribute towards the completion of these second majors or co-majors and/or minors. Any unit(s) that appear in multiple second major or co-majors and/or minors can only contribute towards the completion of one of these second major or co-majors or minors.

Advertising

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

AMB200	Consumer Behaviour
AMB220	Advertising Theory and Practice
AMB221	Advertising Copywriting
AMB319	Media Planning
AMB320	Advertising Management
AMB339	Advertising Campaigns
AMB330	Advertising Planning Portfolio
BSB126	Marketing

Animation

KIB105	Animation and Motion Graphics
KIB108	Animation History and Practices
KIB203	Introduction to 3D Computer Graphics
KIB225	Character Development, Conceptual Design and Animation Layout
KIB316	Virtual Environments
KIB325	Real-Time 3D Computer Graphics
KVB105	Drawing for Design
KVB106	Drawing for Animation

Art and Design History

Description: This co-major equips you with the educational base necessary for a career in the arts professions, such as curatorial work, art criticism and arts administration. It offers a coherent and sequential set` of units that provide a platform for a research-based study of the visual arts, design and architecture. In conjunction with further study, this co-major will

assist in preparing you for work as a professional in these disciplines.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

DAB325	Architecture in the 20th Century
DAB420	Architecture, Culture and Space
DEB102	Introducing Design History
KVB102	Modernism
KVB103	Australian Art
KVB108	Contemporary Asian Visual Culture
KVB211	Post 1945 Art
KVB212	Australian Art, Architecture and Design
KVB304	Contemporary Art Issues
KVB306	Video Art and Culture

Communication Design

*continuing students only

Description: The aim of this co-major is to provide you with skills and knowledge in the domain of Communication Design. The co-major provides an introduction to the principles and practice of Communication Design, and the practical use of media technologies. Foundations of Communication Design and Media Technology units provide both a practical and theoretical basis for the studio units. Design Studio units situate the knowledge and skills gained from the first-level (100 coded) units into practice in a production / project setting, in the application areas of web development and interactive multimedia respectively.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KIB101	Visual Communication
KIB102	Visual Interactions
KIB103	Introduction to Web Design and Development
KIB104	Digital Media
KIB205	Programming for Visual Designers and Artists
KIB214	Design for Interactive Media
KIB216	Advanced Web Design
KIB230	Interface and Information Design

Creative and Professional Writing

Description: The aim of this co-major is to prepare students to graduate with adequate skills and knowledge in the area of creative and professional writing; to provide a thorough grounding in a variety of genres that include fiction, creative non-fiction, media writing and corporate writing and editing, thereby equipping graduates with the versatility required of professional writers; to enhance the critical, analytical and peer-reviewing skills of students; to provide and understanding of creative writing in its social and generic contexts.

Assumed Knowledge: There is no specific prior

knowledge required as a prerequisite to undertaking this co-major.

KWB101	Introduction to Creative Writing
KWB102	Media Writing
KWB103	Persuasive Writing
KWB104	Creative Writing: The Short Story
KWB106	Corporate Writing and Editing
KWB107	Creative Non-Fiction
KWB206	Youth and Children's Writing
KWB207	Great Books: Creative Writing Classics
KWB211	Stylistics and Poetics
KWB303	Writing and Publishing Industry
KWB313	Novel and Memoir

Dance

Description: This co-major aims to provide a broad grounding in practical and theoretical aspects of dance. You will gain skills in contemporary dance, ballet, commercially driven genres, choreography and critical thinking and writing together with an understanding of the social and historical context of ballet, contemporary dance, and popular and world dance.

Assumed Knowledge: Previously acquired knowledge or skill IS required for you to undertake this co-major. It is essential that you be physically able, fit and have basic knowledge in a dance technique, either ballet, jazz or contemporary to undertake the practical units.

KDB103	Dance Technique Studies 1
KDB104	Dance Technique Studies 2
KDB105	Architecture of the Body
KDB106	Dance Analysis
KDB107	Choreographic Studies 1
KDB108	World Dance
KDB109	Funk, Tap and all that Jazz
KDB110	Deconstructing Dance in History
KDB204	Australian Dance
KDB205	Dance in Education
KDB225	Music Theatre Skills

Digital Media

Description: Online and interactive technologies now dominate creative and professional life. This co-major provides you with the opportunity to develop websites, multimedia projects, wikis and blogs, as well as allowing you to understand the guiding principals behind these new modes of communication and creative practice.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KCB101	Communication in the New Economy
KCB102	Media and Society: From Printing Press to Internet

OR

KJB101	Digital Journalism
KCB104	Media and Communications Industries
	OR
KPB106	Australian Television
KCB201	New Media 1: Information and Knowledge
KCB202	New Media 2: Applications and Implications
KCB203	Consumer Cultures
KIB101	Visual Communication
KIB103	Introduction to Web Design and Development
KVB306	Video Art and Culture

Drama

Description: The co-major offers a balance of performance theory and practice. It is designed as a learning sequence, beginning with introductory concepts and practices, through intermediate and on to advanced learning. Underpinning the co-major is a twin focus on contemporary performance-making and events management. Both of these areas are balanced by studies in theatre history and theory. Core topics include acting; directing; twentieth-century performance theory and practice; and events management.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KTB101	20th Century Performance
KTB103	Performing Skills 1: Character and Scene
KTB104	Performance Innovation
KTB106	Performing Skills 2: Style and Form
KTB204	Understanding Performance
KTB207	Staging Australia
KTB210	Creative Industries Management
KTB211	Creative Industries Events and Festivals
KTB305	The Entrepreneurial Artist
KTB306	Directing for Performance Events and Festivals

Entrepreneurship

Description: To provide students with an introduction to basic business principles as well as the innovation, development, production and entrepreneurial activities required when starting a new business. Students who do the extended eight unit set will be able to supplement this with a range of broader business administration and promotional skills particularly in the marketing and management areas.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

AMB230	Digital Promotions
AMB240	Marketing Planning and Management
AMB251	Innovation and Brand Management
BSB115	Management, People and Organisations

BSB126	Marketing
EFB210	Finance 1
IBB213	International Marketing
MGB207	Human Resource Issues and Strategy
MGB216	Managing Technology, Innovation and Knowledge
MGB324	Managing Business Growth
MGB222	Managing Organisations
MGB223	Entrepreneurship and Innovation
MGB335	Project Management

Fashion

Description: This co-major has been designed to offer a mix of theoretical and practical units. The theory units will develop your knowledge and understanding of the history, industry and consumption of fashion and will introduce you to the critical legal issues surrounding the production and distribution of fashion. The practical units provide you with a variety of options to develop fashion related skills focusing on textile design, portfolio development and fashion journalism.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KCB203	Consumer Cultures
KFB103	Introduction to Fashion
KFB106	Unspeakable Beauty: A History of Fashion and Style
KFB107	Drawing For Fashion
KFB205	Fashion and Style Journalism
KFB206	Fashion and Modernity
KFB207	Contemporary Fashion
KFB208	Fashion Portfolio
KFB209	Ragtrade: Wholesaling Fashion
KFB304	Fashion, Law and the Real World
KVB213	Graphic Investigation

Film, Television and Screen

Description: The aim of this co-major is to provide students with a range of understandings in the theory and practice of film, television and screen. This study area aims to enhance creative, technical and organizational abilities as well as building story telling and communication skills.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KPB101	Foundations of Film and Television Production
KPB102	Film History
KPB104	Film and Television Production Resource Management
KPB105	Narrative Production
KPB106	Australian Television
KPB107	Television's Greatest Hits

KPB108	Media Text Analysis
KPB202	Film and Television Business Skills: Entrepreneurship and Investment
KPB203	Australian Film
KPB205	Documentary Theory and Practice
KPB206	International Cinema
KPB303	Critical Thinking About Television

Game Design

INB180	Computer Games Studies
INB181	Games Production
INB280	Games Design
INB272	Interaction Design
INB104	Building IT Systems
INB281	Advanced Games Design
KIB101	Visual Communication
KIB102	Visual Interactions

Integrated Marketing Communication

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

AMB202	Integrated Marketing Communication
AMB208	Events Marketing
AMB220	Advertising Theory and Practice
AMB230	Digital Promotions
AMB240	Marketing Planning and Management
AMB260	Public Relations Theory and Practice
AMB261	Media Relations and Publicity
AMB331	Direct Marketing
AMB350	Sales and Customer Relationship Management
BSB126	Marketing

Interactive and Visual Design

KIB101	Visual Communication
KIB102	Visual Interactions
KIB103	Introduction to Web Design and Development
KIB104	Digital Media
KIB214	Design for Interactive Media
KIB216	Advanced Web Design
KIB230	Interface and Information Design
KIB315	Contemporary Issues in Digital Media

Journalism, Media and Communication

Description: This co-major offers you a range of options to develop an understanding of the parameters of the journalism and professional communication fields. You can choose a mix of units to suit your career aspirations. If you choose to focus more on the Journalism (KJB) units, the co-major will introduce you to a range of journalism writing styles and offers an insight into some specialist areas of reporting. If you choose to focus more on the Media and Communication (KCB) units, it has been designed to enable you to develop the skills and knowledge to prepare media material for organizations that wish to build, and maintain, a media profile.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KCB102	Media and Society: From Printing Press to Internet
	OR
KJB101	Digital Journalism
KJB120	Newswriting
KCB104	Media and Communications Industries
KJB121	Journalistic Inquiry
KCB103	Strategic Speech Communication
KJB224	Feature Writing
KJB239	Journalism Ethics and Issues
KFB205	Fashion and Style Journalism
	OR
KJB280	International Journalism
KCB301	Media Audiences
KCB302	Political Communication
KCB304	Managing Communication Resources
	OR
KJB337	Public Affairs Reporting

Literary Studies

Description: The aims of this co-major are to prepare students to graduate with adequate skills and knowledge in the area of literary and cultural studies; to provide a thorough grounding in a range of texts, both literary and popular, ranging from Shakespeare to nineteenth and twentieth century literature and culture; to provide graduates with enhanced skills in critical thinking, writing and analysis; to provide graduates with an understanding of the social and historical context of literary and popular written texts; to provide some understanding of the major approaches in literary theory.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KWB108	Introduction To Literary Studies
KWB109	Writing Australia
KWB206	Youth and Children's Writing
KWB207	Great Books: Creative Writing Classics
KWB208	Modern Times (Literature and Culture in the 20th Century)
KWB209	Shakespeare, Then and Now
KWB308	Wonderlands: Literature and Culture in the 19th Century
KWB309	Popular Fictions, Popular Culture

Marketing

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research
AMB202	Integrated Marketing Communication
AMB240	Marketing Planning and Management
AMB335	E-Marketing Strategies
AMB340	Services Marketing
AMB341	Strategic Marketing
BSB126	Marketing

Mathematics

Description: This co-major aims to provide you with powerful tools for the analysis of today's complex world and give an insight into many real-world problems of significant importance.

Assumed Knowledge: Maths B (if you do not have this you should include MAB105 as one of your first units)

MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB314	Statistical Modelling 2

Online Environments

INB104	Building IT Systems

Choose 3 of the following units (INB122 and INB210 cannot both be taken)

INB122	Organisational Databases
INB210	Databases
INB270	Programming
INB271	The Web
INB272	Interaction Design

Choose 4 of the following INB 300-level units

INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB340	Database Design
INB345	Devices in the Wild
INB346	Web 2.0
INB370	Software Development
INB373	Web Application Development

Public Relations

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

AMB201	Marketing and Audience Research
AMB202	Integrated Marketing Communication
AMB261	Media Relations and Publicity
AMB262	Public Relations Writing
AMB263	Public Relations Theory and Practice
AMB373	Corporate Communication
AMB374	Global Public Relations Cases
AMB379	Public Relations Campaigns
BSB126	Marketing

Creative Industries Minors

INSTRUCTIONS FOR MINORS

Please refer to the following study sequences to plan your program. You must complete 48 credit points (normally four 12 credit point subjects) from the specified units to achieve a minor, following semester of offer and unit prerequisites (where applicable) to determine order of enrolment. Any unit(s) that appear in these majors and/or minors and are also mandatory elsewhere in your course can not contribute towards the completion of these majors and/or minors. Any unit(s) that appear in multiple majors and/or minors can only contribute towards the completion of one of these majors or minors.

3D Visualisation

KIB203	Introduction to 3D Computer Graphics
KIB225	Character Development, Conceptual Design and Animation Layout
KIB316	Virtual Environments
KIB325	Real-Time 3D Computer Graphics

Advertising

AMB220	Advertising Theory and Practice
AMB318	Advertising Copywriting
AMB319	Media Planning
BSB126	Marketing
AMB200	Consumer Behaviour

Animation

KIB105	Animation and Motion Graphics
KIB108	Animation History and Practices
KVB105	Drawing for Design
KVB106	Drawing for Animation

Art History

KVB102	Modernism
KVB103	Australian Art
KVB211	Post 1945 Art
KVB304	Contemporary Art Issues

Art, Design and Architecture

DAB325	Architecture in the 20th Century
DEB102	Introducing Design History

KVB212	Australian Art, Architecture and Design	
KVB306	Video Art and Culture	

Advanced Interactive Media

KKB216	Graphical Development Environments for Media Interaction
KIB205	Programming for Visual Designers and Artists
KIB309	Embodied Interactions
KIB314	Tangible Media

Audience and User Research

KCB102	Media and Society: From Printing Press to Internet
KCB105	Media and Communication Research Methods
KCB203	Consumer Cultures
KCB301	Media Audiences

Communication Design

	*This minor is available to students who commenced 2008 or earlier
KIB101	Visual Communication
KIB102	Visual Interactions
KIB103	Introduction to Web Design and Development
KIB104	Digital Media

Communication for the Professions

KCB103	Strategic Speech Communication
KCB302	Political Communication
KCB304	Managing Communication Resources
KWB103	Persuasive Writing
KWB106	Corporate Writing and Editing

Creative Writing

KWB101	Introduction to Creative Writing
KWB102	Media Writing
KWB104	Creative Writing: The Short Story
KWB107	Creative Non-Fiction
KWB207	Great Books: Creative Writing Classics
KWB313	Novel and Memoir

Dance Studies

KDB105	Architecture of the Body
KDB106	Dance Analysis
KDB110	Deconstructing Dance in History
KDB204	Australian Dance
KDB225	Music Theatre Skills

Digital Media

KIB101	Visual Communication
KIB103	Introduction to Web Design and Development
KCB201	New Media 1: Information and Knowledge
KCB202	New Media 2: Applications and Implications

KVB306	Video Art and Culture

Drama

KDB225	Music Theatre Skills
KTB103	Performing Skills 1: Character and Scene
KTB104	Performance Innovation
KTB106	Performing Skills 2: Style and Form
KTB204	Understanding Performance
KTB305	The Entrepreneurial Artist

Entrepreneurship

AMB251	Innovation and Market Management
BSB115	Management People and Organisations
BSB126	Marketing
MGB223	Entrepreneurship and Innovation
AMB240	Marketing Planning and Management
MGB207	HR Issues and Strategy

Fashion

KFB103	Introduction to Fashion
KFB106	Unspeakable Beauty: A History of Fashion and Style
KFB206	Fashion and Modernity
KFB207	Contemporary Fashion

French

HHB061	French 1
HHB062	French 2
HHB063	French 3
HHB064	French 4
HHB065	French 5
HHB066	French 6
HHB067	French 7
HHB068	French 8

Game Design

ITB750	Computer Game Studies
ITB751	Games Production
KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion

German

HHB091	German 1
HHB092	German 2
HHB093	German 3
HHB094	German 4
HHB095	German 5
HHB096	German 6
HHB097	German 7
HHB098	German 8

Graphic Design

KIB101	Visual Communication
KIB335	Typography and Illustration
KIB338	Print Media
KVB204	Graphic Design

Indigenous Studies

EDB007	Culture Studies: Indigenous Education
HHB123	Indigenous Australian Culture Studies
HHB210	Indigenous Australia: Country, Kin And Culture
HHB255	Indigenous Politics And Political Culture
HHB276	Indigenous Knowledge: Research Ethics and Protocols
KKB004	Indigenous Creative Industries
KWB307	Indigenous Writing

Indonesian

HHB071	Indonesian 1
HHB072	Indonesian 2
HHB073	Indonesian 3
HHB074	Indonesian 4
HHB075	Indonesian 5
HHB076	Indonesian 6
HHB077	Indonesian 7
HHB078	Indonesian 8

Information Technology

	Choose 2 of the following units
INB101	Impact of IT
INB102	Emerging Technologies
INB104	Building IT Systems
	Choose 2 of the following units (INB122 or INB210 cannot both be taken)
INB122	Organisational Databases
INB210	Databases
INB251	Networks
INB255	Security
INB270	Programming
INB271	The Web
INB272	Interaction Design

Integrated Marketing Communication

AMB202	Integrated Marketing Communication
AMB220	Advertising Theory and Practice
AMB263	Public Relations Theory and Practice
BSB126	Marketing
AMB261	Media Relations and Publicity
AMB208	Events Marketing

Interactive and Visual Design

KIB101	Visual Communication
KIB102	Visual Interactions
KIB103	Introduction to Web Design and Development
KIB104	Digital Media

International Business

BSB119	International and Electronic Business
IBB205	Cross-Cultural Communication and Negotiation
IBB210	Export Management
IBB303	International Logistics

Japanese

HHB081	Japanese 1
HHB082	Japanese 2
HHB083	Japanese 3
HHB084	Japanese 4
HHB085	Japanese 5
HHB086	Japanese 6
HHB087	Japanese 7
HHB088	Japanese 8

Journalism

KJB101	Digital Journalism
KJB120	Newswriting
KJB121	Journalistic Inquiry
KJB224	Feature Writing

Lighting Design

PCN121	Vision Colour and Photometry
PCN122	Lighting Design
PCN123	Sustainability and Human Factors
PCN124	Lamps and Luminaires

Literature

KWB109	Writing Australia
KWB206	Youth and Children's Writing
KWB207	Great Books: Creative Writing Classics
KWB208	Modern Times (Literature and Culture in the 20th Century)
KWB209	Shakespeare, Then and Now
KWB308	Wonderlands: Literature and Culture in the 19th Century

Management

BSB115	Management, People and Organisations
MGB210	Production and Service Management
MGB220	Management Research Organisations
MGB222	Managing Organisations
MGB309	Strategic Management
MGB334	Managing in a Changing Environment

Marketing

AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research
AMB240	Marketing Planning and Management
BSB126	Marketing
AMB335	E-Marketing Strategies

Mathematics

MAB100	Mathematical Sciences 1A
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB311	Advanced Calculus

Modern and Popular Literature and Culture

KWB108	Introduction To Literary Studies
KWB109	Writing Australia
KWB206	Youth and Children's Writing
KWB208	Modern Times (Literature and Culture in the 20th Century)
KWB308	Wonderlands: Literature and Culture in the 19th Century
KWB309	Popular Fictions, Popular Culture

Music Studies

KDB225	Music Theatre Skills
KMB002	Music and Spirituality
KMB003	Sex Drugs Rock 'n' roll
KMB004	World Music
KMB107	Sound, Image, Text

Performance Events and Festivals

KTB101	20th Century Performance
KTB207	Staging Australia
KTB210	Creative Industries Management
KTB211	Creative Industries Events and Festivals
KTB306	Directing for Performance Events and Festivals

Professional Writing

KWB102	Media Writing
KWB103	Persuasive Writing
KWB106	Corporate Writing and Editing
KWB303	Writing and Publishing Industry

Screen Studies

KPB102	Film History (recommended)
KPB103	Film Genres (recommended)
KPB203	Australian Film
KPB205	Documentary Theory and Practice
KPB206	International Cinema

Public Relations

AMB263	Public Relations Theory and Practice
AMB261	Media Relations and Publicity
AMB262	Public Relations Writing
BSB126	Marketing
AMB360	Corporate Communication Management
AMB370	Public Relations Cases

Sound Studies

KMB104	Music and Sound Skills
KMB105	Music and Sound Technology
KMB106	Music and Sound for Multimedia
KMB108	Sound Recording and Acoustics

Television

KPB104	Film and Television Production Resource Management
KPB106	Australian Television
KPB107	Television's Greatest Hits
KPB202	Film and Television Business Skills: Entrepreneurship and Investment
KPB303	Critical Thinking About Television

Visual Arts Practice

KVB110	2D Media and Processes
KVB111	3D Media and Processes
KVB200	Exhibition and Display in the Visual Arts
KVB213	Graphic Investigation

Transitions to New Professional Environments Units

A maximum of 48 credit points may be taken from the following units:

KKB341	Workplace Learning 1
KKB342	Workplace Learning 2
KKB343	Service Learning 1
KKB344	Service Learning 2
KKB345	Creative Industries Project 1
KKB346	Creative Industries Project 2
KKB347	Becoming A Researcher: Understandings, Skills and Practices
KKB348	Becoming A Researcher: Contexts, Protocols and Impact
KKB350	Creative Industries International Study Tour

Creative Industries Faculty Undergraduate Open Electives

Creative Industries Faculty Undergraduate Open Electives

These unit offerings are current at the time of publication but are subject to change.

Rules for selecting electives:

* you must obey any elective rules as set out in

your course requirements

* you cannot select a unit that forms part of the compulsory units of your course or the compulsory units of your chosen sub-major area.

* you must have successfully completed any pre/co-requisite units applicable

* the offering of elective units is subject to sufficient student enrolment numbers and staff availability

* some units are subject to quota restrictions

* KK33, KK34, KJ32, KM32, IX07 and IX16 students ONLY are permitted to select electives from outside the Faculty of Creative Industries

Semester 1 Units

Media & Communication

KCB101	Communication in the New Economy
KCB102	Media and Society: From Printing Press to Internet
KCB103	Strategic Speech Communication
KCB201	Virtual Cultures
KCB302	Political Communication

Communication Design

| KIB108 | Animation Practices |
| KIB201 | Interactive Writing |

Dance

KDB105	Architecture of the Body
KDB108	World Dance
KDB110	Deconstructing Dance in History

Fashion

| KFB103 | Introduction to Fashion |
| KFB206 | Fashion and Modernity |

Journalism

KJB101	Digital Journalism
KJB120	Newswriting
KJB121	Journalistic Inquiry
KJB224	Feature Writing
KJB239	Journalism Ethics and Issues

Faculty

KKB004	Indigenous Creative Industries
KKB101	Creative Industries: People and Practices
KKB210	Computational Arts 1

Transition to New Professional Environments*

KKB341	Workplace Learning 1
KKB342	Workplace Learning 2
KKB343	Service Learning 1
KKB344	Service Learning 2
KKB345	Creative Industries Project 1
KKB346	Creative Industries Project 2
KKB347	Becoming A Researcher: Understandings, Skills and Practices

Music & Sound

KMB003	Sex Drugs Rock 'n' roll
KMB004	World Music
KMB104	Music and Sound Skills
KMB105	Music and Sound Technology
KMB108	Sound Recording and Acoustics

Film & Television

KPB102	Film History
KPB106	Australian Television
KPB202	Film and Television Business Skills: Entrepreneurship and Investment
KPB203	Australian Film
KPB303	Critical Thinking About Television

Performance Studies

KTB101	20th Century Performance
KTB204	Understanding Performance
KTB061	Creative Industries Management
KTB062	Creative Industries Events and Festivals

Visual Arts

KVB102	Modernism
KVB104	Photomedia and Artistic Practice
KVB110	2D Media and Processes
KVB212	Australian Art, Architecture and Design
KVB304	Contemporary Art Issues

Creative Writing & Cultural Studies

KWB101	Introduction to Creative Writing
KWB102	Media Writing
KWB103	Persuasive Writing
KWB104	Creative Writing: The Short Story
KWB105	Film and Television Scriptwriting
KWB107	Introduction to Creative Non-Fiction
KWB108	Introduction To Literary Theory and Cultural Studies
KWB207	Great Books: The Literary Classics
KWB208	Modern Times (Literature and Culture in the 20th Century)
KWB308	Wonderlands: Literature and Culture in the 19th Century

Semester 2 Units

Media & Communication

| KCB101 | Communication in the New Economy |

KCB103	Strategic Speech Communication
KCB104	Media and Communications Industries
KCB105	Media and Communication Research Methods
KCB202	New Media Technologies
KCB203	Consumer Cultures

Communication Design

| KIB202 | Enabling Immersion |

Dance

KDB106	Dance Analysis
KDB109	Funk, Tap and all that Jazz
KDB204	Australian Dance

Faculty

| KKB102 | Creative Industries: Making Connections |
| KKB211 | Computational Arts 2 |

Transition to New Professional Environments*

KKB341	Workplace Learning 1
KKB342	Workplace Learning 2
KKB343	Service Learning 1
KKB344	Service Learning 2
KKB345	Creative Industries Project 1
KKB346	Creative Industries Project 2
KKB348	Becoming A Researcher: Contexts, Protocols and Impact
KKB350	Creative Industries International Study Tour

Fashion

| KFB106 | Unspeakable Beauty: A History of Fashion and Style |
| KFB207 | Contemporary Fashion |

Journalism

KJB101	Digital Journalism
KJB120	Newswriting
KJB121	Journalistic Inquiry
KJB224	Feature Writing
KJB280	International Journalism
KJB337	Public Affairs Reporting

Music & Sound

KMB002	Music and Spirituality
KMB007	Introductory Ensemble
KMB105	Music and Sound Technology
KMB107	Sound, Image, Text
KMB108	Sound Recording and Acoustics
KMB205	Sound Media Musicianship

Film & Television

KPB103	Film Genres
KPB104	Film and Television Production Resource Management
KPB107	Television's Greatest Hits
KPB205	Documentary Theory and Practice
KPB206	International Cinema

Performance Studies

KTB104	Performance Innovation
KTB207	Staging Australia
KTB062	Creative Industries Events and Festivals

Visual Arts

KVB103	Australian Art
KVB104	Photomedia and Artistic Practice
KVB108	Contemporary Asian Visual Culture
KVB111	3D Media and Processes
KVB211	Post 1945 Art
KVB306	Video Art and Culture
KVB307	Theories of Spatial Culture

Creative Writing & Cultural Studies

KWB102	Media Writing
KWB104	Creative Writing: The Short Story
KWB105	Film and Television Scriptwriting
KWB106	Corporate Writing and Editing
KWB109	Ozlit
KWB204	Creative Non-Fiction: Life Writing
KWB206	Youth and Children's Writing
KWB209	Shakespeare, Then and Now
KWB307	Indigenous Writing
KWB309	Popular Fictions, Popular Culture

NOTES:

* Only one Workplace Learning unit may be completed

* KKB290, KKB357, KKB320, KKB330, KKB340-1 and KKB340-2 are only available to students enrolled in Creative Industries courses.

Potential Careers:

Advertising Professional, Animator, Artist, Arts Administrator, Composer, Computer Game Programmer, Computer Games Developer, Creative Writer, D.J, Digital Composer, Film Composer, Film/Television Producer, Information Officer, Information Security Specialist, Internet Professional, Marketing Officer/Manager, Media Industry Specialist, Multimedia Designer, Music Agent/Manager, Music Publisher, Music Sampler, Music Teacher, Music Technologist, Musical Director, Musician, Organisational Communication Specialist, Public Relations Officer/Consultant, Recording Engineer, Song Writer, Sound and Music Producer, Sound Designer, Sound/Audio Engineer, Technical Officer, Web Designer.

Bachelor of Information Technology/Bachelor of Mathematics (IX29)

Year offered: 2009
Admissions: No
CRICOS code: 059226F
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
QTAC code: 419552
Past rank cut-off: 76
Past OP cut-off: 12
OP Guarantee: Yes
Assumed knowledge: English (4,SA) and Maths B (4,SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 384
Course coordinator: Dr Gary Carter (Mathematics), Mr Richard Thomas (IT)
Campus: Gardens Point

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 enquiry.scitech@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 School of ITâs 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 youâre 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

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Contact Details

Information Technology Coordinator
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Mathematics Coordinator
Dr Gary Carter
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Email: g.carter@qut.edu.au

Course Structure for students with four semesters of Senior Mathematics B and Senior Mathematics C

Course Structure 2009	
	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 enquiry.scitech@qut.edu.au for any enquiries.
	For students with four semesters of Senior Mathematics B and Senior Mathematics C (or equivalent) with an exit assessment of at least Sound Achievement in both

Year 1, Semester 1	
INB103	Industry Insights
INB250	Systems Architecture
MAB111	Mathematical Sciences 1B

MAB112	Mathematical Sciences 1C

Year 1, Semester 2

INB210	Databases
INB251	Networks
MAB210	Statistical Modelling 1
MAB220	Computational Mathematics 1

Year 2, Semester 1

INB104	Building IT Systems
	Choose one unit from: Intermediate Level Elective list. This choice will replace ITB008 from 2009 course summary.
MAB101	Statistical Data Analysis 1
MAB312	Linear Algebra

Year 2, Semester 2

INB270	Programming
INB271	The Web
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 3, Semester 1

	IT Major Unit
	IT Major Unit
MAB311	Advanced Calculus
	Level 2 or 3 Maths unit

Year 3, Semester 2

INB301	The Business of IT
	IT Major Unit
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 4, Semester 1

INB302	Capstone Project
	IT Major Unit
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 4, Semester 2

	IT Major Unit
	IT Major Unit
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Course Structure for students with four semesters of Senior Mathematics B (or equivalent) only

For students with four semesters of Senior Mathematics B (or equivalent) only, with an exit assessment of at least Sound Achievement

Year 1, Semester 1

INB103	Industry Insights
INB250	Systems Architecture
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1

Year 1, Semester 2

INB210	Databases
INB251	Networks
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C

Year 2, Semester 1

INB104	Building IT Systems
	Choose one unit from: Intermediate Level Elective list. This choice will replace ITB008 from 2009 course summary.
MAB220	Computational Mathematics 1
MAB312	Linear Algebra

Year 2, Semester 2

INB270	Programming
INB271	The Web
MAB210	Statistical Modelling 1
	Level 2 or 3 Maths Unit

Year 3, Semester 1

	IT Major Unit
	IT Major Unit
MAB311	Advanced Calculus
	Level 2 or 3 Maths unit

Year 3, Semester 2

INB301	The Business of IT
	IT Major Unit
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 4, Semester 1

INB302	Capstone Project
	IT Major Unit
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 4, Semester 2

	IT Major Unit
	IT Major Unit
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Mathematics Units

Level 2 Units

MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2
MAB315	Operations Research 2
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB420	Computational Mathematics 2
MAB422	Mathematical Modelling
MAB461	Discrete Mathematics
MAB480	Introduction to Scientific Computation
MAB481	Visualisation and Data Analysis
	Note: MAB311 Advanced Calculus and MAB312 Linear Algebra are mandatory units.

Level 3 Units - at least 4 units must be selected	
MAB521	Applied Mathematics 3
MAB522	Computational Mathematics 3
MAB524	Statistical Inference
MAB525	Operations Research 3A
MAB533	Statistical Techniques
MAB536	Time Series Analysis
MAB613	Partial Differential Equations
MAB623	Financial Mathematics
MAB624	Applied Statistics 3
MAB625	Operations Research 3B
MAB640	Industry Project
MAB672	Advanced Mathematical Modelling
MAB681	Advanced Visualisation and Data Analysis
	Note: MAB523 Introduction to Quality Management and MAB621 Discrete Mathematics do not contribute to the mandatory 48 credit points minimum from Level 3 Mathematics units.

Intelligent Systems Major

Compulsory Units	
INB342	Enterprise Data Mining
INB371	Data Structures and Algorithms

Elective Units	
	Select two (2) units from the following list
INB335	Information Resources
INB860	Computational Intelligence for Control and Embedded Systems

Network Systems Major

Compulsory Units	
INB350	Internet Protocols and Services
INB351	Computer Network Administration

INB352	Network Planning and Deployment
INB255	Security

Electives	
INB312	Enterprise Systems Applications
INB365	Systems Programming
INB353	Wireless and Mobile Networks
INB355	Cryptology and Protocols

Software Architecture Major

Compulsory Units	
INB340	Database Design
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles

Electives	
	Choose 3 Electives
INB341	Software Development With Oracle
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
INB272	Interaction Design
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB320	Business Process Modelling
INB365	Systems Programming
INB370	Software Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
MAB281	Mathematics for Computer Graphics
	MAB281 is only to be used as a prereq for INB381
	null

Potential Careers:

Actuary, Computer Game Programmer, Data Communications Specialist, Database Manager, Market Research Manager, Mathematician, Network Administrator, Network Manager, Programmer, Quantitative Analyst, Software Engineer, Statistician, Systems Analyst.

Bachelor of Applied Science / Bachelor of Business (IX31)

Year offered: 2009
Admissions: Yes
CRICOS code: 042263G
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,559 (indicative) per semester
International Fees (per semester): 2009: $11,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419832
Past rank cut-off: 77
Past OP cut-off: 12
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 384
Standard credit points per full-time semester: 48
Course coordinator: Dr Perry Hartfield (Science); Dr Erica French (Business)
Discipline coordinator: Ms Ros Kent (Accountancy); Ms Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Robert Bianchi (Finance); Dr Robert Thompson (Human Resource Management); Mr Michael Cox (International Business); Dr Kavoos Mohannak (Management); Mr Bill Proud (Marketing); and Ms Amisha Mehta (Public Relations). Science Discipline Coordinator details are listed under Contact Details below.
Campus: Gardens Point

Career Opportunities

By combining your science studies with the Bachelor of Business you will develop the entrepreneurial skills necessary to sell your abilities to a range of employers. As a graduate of the Bachelor of Applied Science/Bachelor of Business, you will be able to work at the cutting edge of scientific innovation within a range of public, private and non-profit industries. As well as the range of science-based careers available, you could expect to gain employment as a consultant, marketer, or project manager within firms developing and taking scientific research to the marketplace.

Course Design

The Bachelor of Applied Science allows multi-disciplinary programs of study to help position you within the broad range of science disciplines and qualify you as a competent professional within your chosen field. You can specialise in one of the major areas of study available in the Bachelor of Applied Science course (Biochemistry, Biotechnology, Chemistry, Ecology, Environmental Science, Forensic Science, Geoscience, Microbiology or Physics). See the Bachelor of Applied Science (SC01) course for more details.

To allow you to complete the double degree in a shorter period of time, your co-major will be taken from the business program therefore it is not possible to choose any of the co-majors listed under the Bachelor of Applied Science course.

You can specialise in one or more of the following business majors: Accountancy, Advertising, Finance, Economics, Human Resource Management, International Business, Management, Marketing or Public Relations.

Professional Recognition

Professional Recognition
The Bachelor of Business degree may, subject to choice of major, allow graduates to satisfy the academic requirements for membership as follows:
*All majors: Chartered Secretaries Australia (CSA) - enrolment in the Graduate Diploma in Applied Corporate Governance.
*Accountancy: CPA Australia (associate membership & enrolment in the CPA Program), Institute of Chartered Accountants in Australia (ICAA)(enrolment in the CA Program).
*Advertising - Advertising Federation of Australia, Australian Association of National Advertisers, Australian Direct Marketing Association;
*Economics: Economic Society of Australia (Queensland Division).
*Finance: Financial Services Institute of Australasia (FINSIA).
*Human Resource Management - Australian Human Resources Institute, Australian Institute of Training and Development, Australian Institute of Management;
*International Business - Australian Institute of Export, the Logistics Association of Australia and the Chartered Institute of Purchasing;
*Management - Australian Institute of Management;
*Marketing: Australian Marketing Institute, Market Research Society of Australia, Australian Institute of Management, Australian Institute of Export (Qld) Ltd, American Marketing Association.
*Public Relations - Public Relations Institute of Australia.

Graduates will satisfy the requirements for membership of the relevant professional body for their chosen science major. See the Bachelor of Applied Science (SC01) course for details.

Contact Details

Science Coordinator
Dr Perry Hartfield
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Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, portfolios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Full Time Course structure

Year 1 Semester 1
Business Faculty Core Unit
Business Faculty Core Unit
Science Faculty Unit
Science Faculty Unit

Year 1 Semester 2
Business Faculty Core Unit
Business Faculty Core Unit
Science Faculty Unit
Science Faculty Unit

Year 2 Semester 1
Business Faculty Core Unit
Business Faculty Core Unit
Science Faculty Unit
Science Faculty Unit

Year 2 Semester 2
Business Faculty Core Unit
Business Faculty Major Unit
Science Faculty Unit
Science Faculty Unit

Year 3 Semester 1
Business Faculty Major Unit
Business Faculty Major Unit
Science Faculty Unit
Science Faculty Unit

Year 3 Semester 2
Business Faculty Major Unit
Business Faculty Major Unit
Science Faculty Unit
Science Faculty Unit

Year 4 Semester 1
Business Faculty Major Unit
Business Faculty Major Unit
Science Faculty Unit
Science Faculty Unit

Year 4 Semester 2
Business Faculty Major Unit
Business Faculty Major Unit
Science Faculty Unit
Science Faculty Unit

Accountancy Major

Year 1 Semester 1	
BSB110	Accounting
BSB115	Management

Year 1 Semester 2	

BSB124   Working in Business

BSB126   Marketing

Year 2 Semester 1

BSB111   Business Law and Ethics

BSB113   Economics

Year 2 Semester 2

AYB200   Financial Accounting

AYB225   Management Accounting

Year 3 Semester 1

EFB210   Finance 1

AYB221   Computerised Accounting Systems

Year 3 Semester 2

AYB219   Taxation Law

AYB340   Company Accounting

Year 4 Semester 1

AYB230   Corporations Law

AYB321   Strategic Management Accounting

Year 4 Semester 2

AYB301   Audit and Assurance

AYB311   Financial Accounting Issues

Advertising Major

Year 1 Semester 1

BSB113   Economics

BSB126   Marketing

Year 1 Semester 2

BSB110   Accounting

BSB115   Management

Year 2 Semester 1

BSB119   Global Business

BSB124   Working in Business

Year 2 Semester 2

AMB200   Consumer Behaviour

AMB201   Marketing and Audience Research

Year 3 Semester 1

BSB111   Business Law and Ethics

AMB220   Advertising Theory and Practice

Year 3 Semester 2

AMB318   Advertising Copywriting

AMB319   Media Planning

Year 4 Semester 1

AMB320   Advertising Management

AMB330   Advertising Planning Portfolio

Year 4 Semester 2

AMB339   Advertising Campaigns

BSB123   Data Analysis

Economics Major

Year 1 Semester 1

BSB113   Economics

BSB115   Management

Year 1 Semester 2

BSB110   Accounting

BSB124   Working in Business

Year 2 Semester 1

BSB111   Business Law and Ethics

MGB223   Entrepreneurship and Innovation

Year 2 Semester 2

BSB126   Marketing

EFB223   Economics 2

Year 3 Semester 1

EFB330   Intermediate Macroeconomics

EFB331   Intermediate Microeconomics

Year 3 Semester 2

BSB119   Global Business

          Choice units

Year 4 Semester 1

          Choice units

          Choice units

Year 4 Semester 2

EFB338   Contemporary Application of Economic Theory

          Choice units

Choice units

          Choose any three of the following:

EFB332   Applied Behavioural Economics

EFB333   Introductory Econometrics

EFB334   Environmental Economics and Policy

EFB336   International Economics

EFB337   Game Theory and Applications

Finance Major

Year 1 Semester 1

BSB113   Economics

BSB115   Management

BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1

BSB110	Accounting
BSB111	Business Law and Ethics

Year 2 Semester 2

BSB119	Global Business
MGB223	Entrepreneurship and Innovation

Year 3 Semester 1

EFB210	Finance 1
EFB223	Economics 2

Year 3 Semester 2

EFB201	Financial Markets
EFB307	Finance 2

Year 4 Semester 1

EFB333	Introductory Econometrics
EFB335	Investments

Year 4 Semester 2

EFB312	International Finance
EFB340	Finance Capstone

Human Resource Management Major

Year 1 Semester 1

BSB113	Economics
BSB115	Management

Year 1 Semester 2

BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1

BSB110	Accounting
BSB111	Business Law and Ethics

Year 2 Semester 2

BSB119	Global Business
MGB223	Entrepreneurship and Innovation

Year 3 Semester 1

MGB207	Human Resource Issues and Strategy
MGB220	Business Research Methods

Year 3 Semester 2

MGB200	Leading Organisations
MGB201	Contemporary Employment Relations

Year 4 Semester 1

MGB331	Learning and Development in Organisations
MGB339	Performance and Reward

Year 4 Semester 2

MGB320	Recruitment and Selection
MGB370	Personal and Professional Development

International Business Major

Year 1 Semester 1

BSB126	Marketing
BSB119	Global Business

Year 1 Semester 2

BSB110	Accounting
BSB115	Management

Year 2 Semester 1

BSB113	Economics
BSB124	Working in Business

Year 2 Semester 2

BSB111	Business Law and Ethics
MGB223	Entrepreneurship and Innovation

Year 3 Semester 1

MGB225	Intercultural Communication and Negotiation Skills
AYB227	International Accounting

Year 3 Semester 2

AMB210	Importing and Exporting
EFB240	Finance for International Business

Year 4 Semester 1

AMB303	International Logistics
AMB336	International Marketing

Year 4 Semester 2

MGB340	International Business in the Asia-pacific
AMB369	International Business Strategy

Management Major

Year 1 Semester 1

BSB113	Economics
BSB115	Management

Year 1 Semester 2

BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1

BSB110	Accounting
BSB111	Business Law and Ethics

Year 2 Semester 2
BSB119	Global Business
MGB223	Entrepreneurship and Innovation

Year 3 Semester 1
MGB201	Contemporary Employment Relations
MGB210	Managing Operations

Year 3 Semester 2
MGB200	Leading Organisations
MGB225	Intercultural Communication and Negotiation Skills

Year 4 Semester 1
MGB309	Strategic Management
MGB324	Managing Business Growth

Year 4 Semester 2
MGB310	Sustainability in A Changing Environment
MGB335	Project Management

Marketing Major

Year 1 Semester 1
BSB113	Economics
BSB126	Marketing

Year 1 Semester 2
BSB111	Business Law and Ethics
BSB115	Management

Year 2 Semester 1
BSB119	Global Business
BSB124	Working in Business

Year 2 Semester 2
BSB110	Accounting
MGB223	Entrepreneurship and Innovation

Year 3 Semester 1
AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research

Year 3 Semester 2
AMB202	Integrated Marketing Communication
AMB240	Marketing Planning and Management

Year 4 Semester 1
AMB335	E-marketing Strategies
AMB340	Services Marketing

Year 4 Semester 2

AMB336	International Marketing
AMB359	Strategic Marketing

Public Relations Major

Year 1 Semester 1
BSB119	Global Business
BSB126	Marketing

Year 1 Semester 2
BSB110	Accounting
BSB115	Management

Year 2 Semester 1
BSB113	Economics
BSB124	Working in Business

Year 2 Semester 2
AMB263	Introduction To Public Relations
AMB264	Public Relations Techniques

Year 3 Semester 1
BSB111	Business Law and Ethics
AMB201	Marketing and Audience Research

Year 3 Semester 2
AMB372	Public Relations Planning
AMB373	Corporate Communication

Year 4 Semester 1
AMB374	Global Public Relations Cases
AMB375	Public Relations Management

Year 4 Semester 2
AMB379	Public Relations Campaigns
MGB223	Entrepreneurship and Innovation

Course structure - Major in Biochemistry

Year 1, Semester 1
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1
SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation

Year 3, Semester 2

LQB481	Biochemical Pathways and Metabolism
LQB483	Molecular Biology Techniques

Year 4, Semester 1

LQB581	Functional Biochemistry
LQB582	Biomedical Research Technologies

Year 4, Semester 2

LQB681	Biochemical Research Skills
LQB682	Protein Biochemistry and Bioengineering

Course structure - Major in Biotechnology

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation

Year 3, Semester 2

LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics

Year 4, Semester 1

	TWO units selected from:
LQB583	Genetic Research Technology
LQB584	Medical Cell Biology

LQB585	Plant Genetic Manipulation

Year 4, Semester 2

	TWO units selected from:
LQB682	Protein Biochemistry and Bioengineering
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions

Course structure - Major in Chemistry

Year 1, Semester 1

SCB111	Chemistry 1
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

SCB112	Cellular Basis of Life
SCB121	Chemistry 2

Year 2, Semester 1

MAB100	Mathematical Sciences 1A
SCB110	Science Concepts and Global Systems

Year 2, Semester 2

SCB123	Physical Science Applications
SCB131	Experimental Chemistry

Year 3, Semester 1

PQB312	Analytical Chemistry For Scientists and Technologists
PQB331	Structure and Bonding

Year 3, Semester 2

PQB401	Reaction Kinetics, Thermodynamics and Mechanisms
PQB442	Chemical Spectroscopy

Year 4, Semester 1

PQB502	Materials Chemistry and Characterisation
PQB531	Organic Mechanisms and Synthesis

Year 4, Semester 2

PQB631	Advanced Inorganic Chemistry
PQB642	Chemical Research

Course structure - Major in Ecology

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

SCB120   Plant and Animal Physiology
SCB122   Cell and Molecular Biology

SCB110   Science Concepts and Global Systems
          Plus either:
MAB101   Statistical Data Analysis 1
          Or
MAB105   Preparatory Mathematics

NQB201   Planet Earth
NQB202   History of Life on Earth

NQB302   Earth Surface Systems
NQB321   Ecology

NQB421   Experimental Design
NQB422   Genetics and Evolution

NQB521   Population Genetics and Molecular Ecology
NQB523   Population Management

NQB622   Conservation Biology
NQB623   Ecological Systems

Course structure - Major in Environmental Science

SCB111   Chemistry 1
SCB112   Cellular Basis of Life

SCB120   Plant and Animal Physiology
SCB121   Chemistry 2

SCB110   Science Concepts and Global Systems
          Plus either:
MAB101   Statistical Data Analysis 1
          Or
MAB105   Preparatory Mathematics

NQB202   History of Life on Earth
SCB123   Physical Science Applications

NQB302   Earth Surface Systems

NQB403   Soils and the Environment
NQB421   Experimental Design

NQB501   Environmental Modelling
NQB502   Field Mapping and Monitoring of Natural Resources

NQB601   Sustainable Environmental Management
NQB602   Environmental Chemistry

Course structure - Major in Forensic Science

SCB111   Chemistry 1
SCB112   Cellular Basis of Life

SCB121   Chemistry 2
SCB122   Cell and Molecular Biology

SCB110   Science Concepts and Global Systems
          Plus either:
MAB101   Statistical Data Analysis 1
          Or
MAB105   Preparatory Mathematics

SCB123   Physical Science Applications
SCB131   Experimental Chemistry

LQB383   Molecular and Cellular Regulation
SCB384   Forensic Sciences - From Crime Scene to Court

JSB979   Forensic Scientific Evidence
PQB312   Analytical Chemistry For Scientists and Technologists

PQB513   Instrumental Analysis
PQB584   Forensic Physical Evidence

LQB680   Forensic DNA Profiling
PQB684   Forensic Analysis

Course structure - Major in Geoscience

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
NQB201	Planet Earth
SCB123	Physical Science Applications

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2	
NQB202	History of Life on Earth
SCB222	Exploration of the Universe

Year 3, Semester 1	
NQB311	Mineralogy
NQB314	Sedimentary Geology

Year 3, Semester 2	
NQB411	Petrology of Igneous and Metamorphic Rocks
NQB412	Structural Geology and Field Methods

Year 4, Semester 1	
NQB502	Field Mapping and Monitoring of Natural Resources
NQB513	Geophysics

Year 4, Semester 2	
NQB602	Environmental Chemistry
NQB614	Groundwater Systems

Course structure - Major in Microbiology

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2	
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB386	Microbial Structure and Function

Year 3, Semester 2	
LQB483	Molecular Biology Techniques
LQB486	Clinical Microbiology 1

Year 4, Semester 1	
LQB586	Clinical Microbiology 2
LQB587	Applied Microbiology 1: Water, Air and Soil

Year 4, Semester 2	
LQB686	Microbial Technology and Immunology
LQB687	Applied Microbiology 2: Food and Quality Assurance

Course structure - Major in Physics

Year 1, Semester 1	
MAB111	Mathematical Sciences 1B
SCB111	Chemistry 1

Year 1, Semester 2	
MAB112	Mathematical Sciences 1C
PQB250	Mechanics and Electromagnetism

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
SCB112	Cellular Basis of Life

Year 2, Semester 2	
MAB220	Computational Mathematics 1
PQB251	Waves and Optics

Year 3, Semester 1	
MAB311	Advanced Calculus
PQB350	Thermodynamics of Solids and Gases

Year 3, Semester 2	
PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation

Year 4, Semester 1	
PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques

Year 4, Semester 2	
PQB650	Advanced Theoretical Physics
PQB651	Experimental Physics

Potential Careers:

Academic, Account Executive, Accountant, Advertising Professional, Analytical Chemist, Astrophysicist, Banker, Banking and Finance Professional, Biochemist, Biologist, Biomechanical Engineer, Biomedical Engineer, Biotechnologist, Business Analyst, Chemist, Chemist Industrial, Clinical Laboratory Scientist, Coastal Scientist, Conservation Biologist, Ecologist, Economist, Environmental Scientist, Estimator, Exchange Student, Financial Advisor/Analyst, Financial Project Manager, Forensic Scientist, Funds Manager, Geologist, Geophysicist, Geoscientist, Government Officer, Health Physicist, Home Economist, Human Resource Developer, Human Resource Manager, Hydrogeologist, Immunologist, Industrial Chemist, International Business Specialist, Investment Manager, Laboratory Technician (Chemistry), Manager, Marine Scientist, Marketing Officer/Manager, Medical Biotechnologist, Medical Physicist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Physicist, Plant Biotechnologist, Policy Officer, Population Ecologist, Programmer, Public Relations Officer/Consultant, Public Servant, Stockbroker, Virologist.

Bachelor of Business/Bachelor of Information Technology (IX33)

Year offered: 2009
Admissions: No
CRICOS code: 059595C
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $4,022 (indicative) per semester
International Fees (per semester): 2009: $10,000 (indicative) per semester *(subject to annual review)*
QTAC code: 419202
Past rank cut-off: 76
Past OP cut-off: 12
OP Guarantee: Yes
Assumed knowledge: English (4, SA), Maths A, B or C (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Course coordinator: Ruth Christie (InfoTech); Dr Erica French (Business)
Discipline coordinator: Ms Ros Kent (Accountancy); Ms Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Robert Bianchi (Finance); Dr Robert Thompson (Human Resource Management); Mr Michael Cox (International Business); Dr Kavoos Mohannak (Management); Mr Bill Proud (Marketing); and Ms Amisha Mehta (Public Relations)
Campus: Gardens Point

Course Update

From semester one, 2009 this course will not be available for commencing students. IX33 will only be available for continuing students. New students - please refer to IX58. Please contact enquiry.scitech@qut.edu.au for any enquiries.

Overview

This double degree will give you a broad base of commercial knowledge in business and information technology, making you more attractive to employers, even if you wish to work predominantly in an information technology position. You will have the opportunity to complement your information technology studies with a business major in accountancy, advertising, finance, economics, human resource management, international business, management, marketing or public relations.

You will combine your business studies with an information technology major of your choice. Possible combinations include finance with security, management with business systems engineering, or marketing with information and knowledge management.

Cooperative Education Program

The Coop Ed Program is a joint venture between employers and the Faculty of IT giving you the opportunity of 10-12 months paid industry placement to better prepare you for employment after you graduate. The Coop Ed Program integrates formal study and professional experience, so you can apply what you¿re learning in an area relevant to your chosen path.

Some of the organisations our Coop Ed students have worked with are the Australian Tax Office, Boeing Australia, CITEC, Department of Natural Resources and Water, Dialog, EPA, Queensland Police, RACQ and UNiTAB Limited.

For more information about the IT's Cooperative Education Program, please visit http://coop.fit.qut.edu.au/

Career Outcomes

Business graduates work in diverse roles in the private and public sectors in areas such as accountancy, advertising, banking and finance, economics, human resource management, international business, management, marketing and public relations. A graduate of the Bachelor of Information Technology may find employment as a programmer, systems manager, systems designer, systems analyst, computer sales and marketing consultant or data processing manager.

Professional recognition

The Bachelor of Business degree may, subject to choice of major, extended major, or specialisation, allow graduates to satisfy the academic requirements for membership as follows:
*All majors: Chartered Secretaries Australia (CSA) - enrolment in the Graduate Diploma in Applied Corporate Governance;
*Accountancy: CPA Australia (associate membership & enrolment in the CPA Program), Institute of Chartered Accountants in Australia (ICAA)(enrolment in the CA Program);
*Advertising - Advertising Federation of Australia, Australian Association of National Advertisers, Australian Direct Marketing Association and the Queensland Commercial Radio Association;
*Economics: Economic Society of Australia (Queensland Division);
*Finance: Financial Services Institute of Australasia (FINSIA);
*Human Resource Management - Australian Human Resources Institute, Australian Institute of Training and Development, Australian Institute of Management;
*International Business - Australian Institute of Export, the Logistics Association of Australia and the Chartered Institute of Purchasing;
*Management - Australian Institute of Management;
*Marketing: Australian Marketing Institute, Market Research Society of Australia, Australian Institute of Management, Australian Institute of Export (Qld) Ltd, American Marketing Association;
*Public Relations - Public Relations Institute of Australia.

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

Course Design

Students are required to complete 384 credit points comprised of 192 credit points from the Bachelor of Business program and 192 credit points from the Bachelor or Information Technology program.

Further Information

For information regarding the IT component of this degree, please contact the Course Co-ordinator Richard Thomas - (07)3138 2782 or enquiry.scitech@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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code

Accountancy Major

Year 1 Semester 1	
BSB110	Accounting
BSB115	Management

Year 1 Semester 2	
BSB123	Data Analysis
BSB126	Marketing

Year 2 Semester 1	
BSB111	Business Law and Ethics
BSB113	Economics

Year 2 Semester 2	
AYB200	Financial Accounting
AYB225	Management Accounting

Year 3 Semester 1	
EFB210	Finance 1
AYB221	Computerised Accounting Systems

Year 3 Semester 2	
AYB219	Taxation Law
AYB340	Company Accounting

Year 4 Semester 1	
AYB230	Corporations Law
AYB321	Strategic Management Accounting

Year 4 Semester 2	
AYB301	Audit and Assurance
AYB311	Financial Accounting Issues

Economics Major

Year 1 Semester 1	
BSB113	Economics
BSB115	Management

Year 1 Semester 2	
BSB124	Working in Business
BSB123	null

Year 2 Semester 1	
BSB110	Accounting
BSB111	null

Year 2 Semester 2	
EFB222	Quantitative Methods For Economics and Finance
EFB223	Economics 2

Year 3 Semester 1	
EFB330	Intermediate Macroeconomics
EFB331	Intermediate Microeconomics

Year 3 Semester 2	
	Choice units or remaining Faculty Core Units
	Choice units or remaining Faculty Core Units

Year 4 Semester 1	
	Choice units or remaining Faculty Core Units
	Choice units or remaining Faculty Core Units

Year 4 Semester 2	
EFB338	Contemporary Application of Economic Theory
	Choice units or remaining Faculty Core Units

Choice Units	
	Choose any three of the following:
EFB332	Applied Behavioural Economics
EFB333	Introductory Econometrics
EFB334	Environmental Economics and Policy
EFB336	International Economics
EFB337	Game Theory and Applications

Human Resource Management Major

Year 1 Semester 1	
BSB113	Economics
BSB115	Management

Year 1 Semester 2	
BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1	
BSB110	Accounting
BSB111	Business Law and Ethics

MGB223	Entrepreneurship and Innovation

Year 3 Semester 2

MGB200	Leading Organisations
MGB225	Intercultural Communication and Negotiation Skills

Year 4 Semester 1

MGB309	Strategic Management
MGB324	Managing Business Growth

Year 4 Semester 2

MGB310	Sustainability in A Changing Environment
MGB335	Project Management

Marketing Major

Year 1 Semester 1

BSB113	Economics
BSB126	Marketing

Year 1 Semester 2

BSB111	Business Law and Ethics
BSB115	Management

Year 2 Semester 1

BSB119	Global Business
BSB124	Working in Business

Year 2 Semester 2

BSB110	Accounting
BSB123	Data Analysis

Year 3 Semester 1

AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research

Year 3 Semester 2

AMB202	Integrated Marketing Communication
AMB240	Marketing Planning and Management

Year 4 Semester 1

AMB335	E-marketing Strategies
AMB340	Services Marketing

Year 4 Semester 2

AMB336	International Marketing
AMB359	Strategic Marketing

Course structure

This course has been discontinued. Currently enrolled students should check the Course Summary Sheet (via QUT Virtual) for enrolment and unit information.

Public Relations Major

Year 1 Semester 1

BSB119	Global Business
BSB126	Marketing

Year 1 Semester 2

BSB110	Accounting
BSB115	Management

Year 2 Semester 1

BSB113	Economics
BSB124	Working in Business

Year 2 Semester 2

AMB263	Introduction To Public Relations
AMB264	Public Relations Techniques

Year 3 Semester 1

AMB201	Marketing and Audience Research
BSB111	Business Law and Ethics

Year 3 Semester 2

AMB372	Public Relations Planning
AMB373	Corporate Communication

Year 4 Semester 1

AMB374	Global Public Relations Cases
AMB375	Public Relations Management

Year 4 Semester 2

AMB379	Public Relations Campaigns
BSB123	Data Analysis

Information Systems Major

Compulsory Units

INB311	Enterprise Systems
INB340	Database Design
INB220	Business Analysis

IS Elective Units

INB312	Enterprise Systems Applications
INB342	Enterprise Data Mining
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB320	Business Process Modelling
INB124	Information Systems Development
INB221	Technology Management

Network Systems Major

Compulsory Units

INB350	Internet Protocols and Services

INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB255	Security

Electives	
INB312	Enterprise Systems Applications
INB365	Systems Programming
INB353	Wireless and Mobile Networks
INB355	Cryptology and Protocols

Software Architecture Major

Compulsory Units	
INB340	Database Design
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles

Electives	
	Choose 3 Electives
INB341	Software Development With Oracle
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
INB272	Interaction Design
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB320	Business Process Modelling
INB365	Systems Programming
INB370	Software Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
MAB281	Mathematics for Computer Graphics
	MAB281 is only to be used as a prereq for INB381
	null

Potential Careers:

Account Executive, Accountant, Actuary, Administrator, Advertising Professional, Banker, Banking and Finance Professional, Business Analyst, Certified Practicing Accountant, Computer Games Developer, Computer Salesperson/Marketer, Corporate Secretary, Database Manager, Economist, Electronic Commerce Developer, Financial Advisor/Analyst, Financial Project Manager, Funds Manager, Government Officer, Home Economist, Human Resource Manager, Information Officer, Information Security Specialist, International Business Specialist, Internet Professional, Investment Manager, Manager, Marketing Officer/Manager, Multimedia Designer, Organisational Communication Specialist, Public Relations Officer/Consultant, Publishing Professional, Risk Manager, Stockbroker, Systems Analyst, Systems Manager, Systems Programmer, Systems Trainer, Technical Officer, Trainer,

Bachelor of Business / Bachelor of Mathematics (IX37)

Year offered: 2009
Admissions: Yes
CRICOS code: 059601K
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,559 (indicative) per semester
International Fees (per semester): 2009: $10,000 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419212
Past rank cut-off: 77
Past OP cut-off: 12
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 384
Standard credit points per full-time semester: 48
Course coordinator: Dr Erica French (Business); Prof Erhan Kozan (Mathematics); Dr Helen Johnson (Assistant Course Coordinator - Mathematics)
Discipline coordinator: Ms Ros Kent (Accountancy); Ms Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Robert Bianchi (Finance); Dr Robert Thompson (Human Resource Management); Mr Michael Cox (International Business); Dr Kavoos Mohannak (Management); Mr Bill Proud (Marketing); and Ms Amisha Mehta (Public Relations)
Campus: Gardens Point

Career Opportunities

Graduates are equipped to undertake sophisticated economic and financial modelling which is important in business and government decision making. Quantitative analysts are employed by the financial sector in order to optimise returns both in the short and long-term. Graduates may also become actuarial trainees in the insurance and superannuation area although further study is required in order to qualify as an actuary.

Graduates may find employment as Accountants, Advertising Professionals, Banking and Finance Consultants, Economists, Human Resource Managers, International Business Specialists, Managers, Marketing Officers, Public Relations Officers.

Professional Recognition

The Bachelor of Business degree may, subject to choice of major, allow graduates to satisfy the academic requirements for membership as follows:
*All majors: Chartered Secretaries Australia (CSA) - enrolment in the Graduate Diploma in Applied Corporate Governance.
*Accountancy: CPA Australia (associate membership & enrolment in the CPA Program), Institute of Chartered Accountants in Australia (ICAA)(enrolment in the CA Program).
*Advertising - Advertising Federation of Australia, Australian Association of National Advertisers, Australian Direct Marketing Association;
*Economics: Economic Society of Australia (Queensland Division).
*Finance: Financial Services Institute of Australasia (FINSIA).
*Human Resource Management - Australian Human Resources Institute, Australian Institute of Training and Development, Australian Institute of Management;
*International Business - Australian Institute of Export, the Logistics Association of Australia and the Chartered Institute of Purchasing;
*Management - Australian Institute of Management;
*Marketing: Australian Marketing Institute, Market Research Society of Australia, Australian Institute of Management, Australian Institute of Export (Qld) Ltd, American Marketing Association.
*Public Relations - Public Relations Institute of Australia.

Graduates of the Bachelor of Mathematics degree will be eligible for membership of the Mathematical Society of Australia, the Statistical Society of Australia, and depending on unit selection, the Australian Society of Operations Research.

Course Design

The course offers the opportunity to combine Mathematics with a business course.

This course is made up of 384 credit points. Each component (i.e. Business and Mathematics) comprises 192 credit points.

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

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

Contact Details

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Mathematics Coordinator
Prof Erhan Kozan
Phone: +61 7 3138 1029
Email: e.kozan@qut.edu.au

Mathematics Assistant Course Coordinator
Dr Helen Johnson
Phone: +61 7 3138 2890
Email: h.johnson@qut.edu.au

Full Time Course structure

Year 1 Semester 1

Business Faculty Core Unit
Business Faculty Core Unit
Mathematics Unit
Mathematics Unit

Year 1 Semester 2

Business Faculty Core Unit
Business Faculty Core Unit
Mathematics Unit
Mathematics Unit

Year 2 Semester 1

Business Faculty Core Unit
Business Faculty Core Unit
Mathematics Unit
Mathematics Unit

Year 2 Semester 2

Business Faculty Core Unit
Business Faculty Major Unit
Mathematics Unit
Mathematics Unit

Year 3 Semester 1

Business Faculty Major Unit
Business Faculty Major Unit
Mathematics Unit
Mathematics Unit

Year 3 Semester 2

Business Faculty Major Unit
Business Faculty Major Unit
Mathematics Unit
Mathematics Unit

Year 4 Semester 1

Business Faculty Major Unit
Business Faculty Major Unit
Mathematics Unit

Mathematics Unit

Year 4 Semester 2

Business Faculty Major Unit
Business Faculty Major Unit
Mathematics Unit
Mathematics Unit

Accountancy Major

Year 1 Semester 1

BSB110	Accounting
BSB115	Management

Year 1 Semester 2

BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1

BSB111	Business Law and Ethics
BSB113	Economics

Year 2 Semester 2

AYB200	Financial Accounting
AYB225	Management Accounting

Year 3 Semester 1

EFB210	Finance 1
AYB221	Computerised Accounting Systems

Year 3 Semester 2

AYB219	Taxation Law
AYB340	Company Accounting

Year 4 Semester 1

AYB230	Corporations Law
AYB321	Strategic Management Accounting

Year 4 Semester 2

AYB301	Audit and Assurance
AYB311	Financial Accounting Issues

Advertising Major

Year 1 Semester 1

BSB113	Economics
BSB126	Marketing

Year 1 Semester 2

BSB110	Accounting
BSB115	Management

Year 2 Semester 1

BSB119	Global Business

BSB124	Working in Business

Year 2 Semester 2

AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research

Year 3 Semester 1

BSB111	Business Law and Ethics
AMB220	Advertising Theory and Practice

Year 3 Semester 2

AMB318	Advertising Copywriting
AMB319	Media Planning

Year 4 Semester 1

AMB320	Advertising Management
AMB330	Advertising Planning Portfolio

Year 4 Semester 2

AMB339	Advertising Campaigns
BSB123	Data Analysis

Economics Major

Year 1 Semester 1

BSB113	Economics
BSB115	Management

Year 1 Semester 2

BSB110	Accounting
BSB124	Working in Business

Year 2 Semester 1

BSB111	Business Law and Ethics
MGB223	Entrepreneurship and Innovation

Year 2 Semester 2

BSB126	Marketing
EFB223	Economics 2

Year 3 Semester 1

EFB330	Intermediate Macroeconomics
EFB331	Intermediate Microeconomics

Year 3 Semester 2

BSB119	Global Business
	Choice units

Year 4 Semester 1

	Choice units
	Choice units

Year 4 Semester 2

EFB338	Contemporary Application of Economic Theory

	Choice units

Choice units

	Choose any three of the following:
EFB332	Applied Behavioural Economics
EFB333	Introductory Econometrics
EFB334	Environmental Economics and Policy
EFB336	International Economics
EFB337	Game Theory and Applications

Finance Major

Year 1 Semester 1

BSB113	Economics
BSB115	Management

Year 1 Semester 2

BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1

BSB110	Accounting
BSB111	Business Law and Ethics

Year 2 Semester 2

BSB119	Global Business
MGB223	Entrepreneurship and Innovation

Year 3 Semester 1

EFB210	Finance 1
EFB223	Economics 2

Year 3 Semester 2

EFB201	Financial Markets
EFB307	Finance 2

Year 4 Semester 1

EFB333	Introductory Econometrics
EFB335	Investments

Year 4 Semester 2

EFB312	International Finance
EFB340	Finance Capstone

Human Resource Management Major

Year 1 Semester 1

BSB113	Economics
BSB115	Management

Year 1 Semester 2

BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1

BSB110	Accounting
BSB111	Business Law and Ethics

Year 2 Semester 2

BSB119	Global Business
MGB223	Entrepreneurship and Innovation

Year 3 Semester 1

MGB207	Human Resource Issues and Strategy
MGB220	Business Research Methods

Year 3 Semester 2

MGB200	Leading Organisations
MGB201	Contemporary Employment Relations

Year 4 Semester 1

MGB331	Learning and Development in Organisations
MGB339	Performance and Reward

Year 4 Semester 2

MGB320	Recruitment and Selection
MGB370	Personal and Professional Development

International Business Major

Year 1 Semester 1

BSB126	Marketing
BSB119	Global Business

Year 1 Semester 2

BSB110	Accounting
BSB115	Management

Year 2 Semester 1

BSB113	Economics
BSB124	Working in Business

Year 2 Semester 2

BSB111	Business Law and Ethics
MGB223	Entrepreneurship and Innovation

Year 3 Semester 1

MGB225	Intercultural Communication and Negotiation Skills
AYB227	International Accounting

Year 3 Semester 2

AMB210	Importing and Exporting
EFB240	Finance for International Business

Year 4 Semester 1

AMB303	International Logistics
AMB336	International Marketing

Year 4 Semester 2

MGB340	International Business in the Asia-pacific
AMB369	International Business Strategy

Management Major

Year 1 Semester 1

BSB113	Economics
BSB115	Management

Year 1 Semester 2

BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1

BSB110	Accounting
BSB111	Business Law and Ethics

Year 2 Semester 2

BSB119	Global Business
MGB223	Entrepreneurship and Innovation

Year 3 Semester 1

MGB201	Contemporary Employment Relations
MGB210	Managing Operations

Year 3 Semester 2

MGB200	Leading Organisations
MGB225	Intercultural Communication and Negotiation Skills

Year 4 Semester 1

MGB309	Strategic Management
MGB324	Managing Business Growth

Year 4 Semester 2

MGB310	Sustainability in A Changing Environment
MGB335	Project Management

Marketing Major

Year 1 Semester 1

BSB113	Economics
BSB126	Marketing

Year 1 Semester 2

BSB111	Business Law and Ethics
BSB115	Management

Year 2 Semester 1

BSB119	Global Business
BSB124	Working in Business

Year 2 Semester 2

BSB110   Accounting

MGB223   Entrepreneurship and Innovation

Year 3 Semester 1

AMB200   Consumer Behaviour

AMB201   Marketing and Audience Research

Year 3 Semester 2

AMB202   Integrated Marketing Communication

AMB240   Marketing Planning and Management

Year 4 Semester 1

AMB335   E-marketing Strategies

AMB340   Services Marketing

Year 4 Semester 2

AMB336   International Marketing

AMB359   Strategic Marketing

Public Relations Major

Year 1 Semester 1

BSB119   Global Business

BSB126   Marketing

Year 1 Semester 2

BSB110   Accounting

BSB115   Management

Year 2 Semester 1

BSB113   Economics

BSB124   Working in Business

Year 2 Semester 2

AMB263   Introduction To Public Relations

AMB264   Public Relations Techniques

Year 3 Semester 1

BSB111   Business Law and Ethics

AMB201   Marketing and Audience Research

Year 3 Semester 2

AMB372   Public Relations Planning

AMB373   Corporate Communication

Year 4 Semester 1

AMB374   Global Public Relations Cases

AMB375   Public Relations Management

Year 4 Semester 2

AMB379   Public Relations Campaigns

MGB223   Entrepreneurship and Innovation

Course structure for Students with Four Semesters of Senior Mathematics B and Senior Mathematics C

Year 1, Semester 1

MAB101   Statistical Data Analysis 1

MAB111   Mathematical Sciences 1B

Year 1, Semester 2

MAB112   Mathematical Sciences 1C

MAB210   Statistical Modelling 1

Year 2, Semester 1

MAB311   Advanced Calculus

          Mathematics Elective

Year 2, Semester 2

MAB220   Computational Mathematics 1

          Mathematics Elective

Year 3, Semester 1

MAB312   Linear Algebra

          Mathematics Elective

Year 3, Semester 2

          Mathematics Elective

          Mathematics Elective

Year 4, Semester 1

          Mathematics Elective

          Mathematics Elective

Year 4, Semester 2

          Mathematics Elective

          Mathematics Elective

Course Structure for Students with Four Semesters of Senior Mathematics B Only

Year 1, Semester 1

MAB100   Mathematical Sciences 1A

MAB101   Statistical Data Analysis 1

Year 1, Semester 2

MAB111   Mathematical Sciences 1B

MAB112   Mathematical Sciences 1C

Year 2, Semester 1

MAB210   Statistical Modelling 1

MAB311   Advanced Calculus

Year 2, Semester 2

MAB220   Computational Mathematics 1

          Mathematics Elective

Year 3, Semester 1

MAB312   Linear Algebra

Mathematics Elective

Mathematics Elective

Mathematics Elective

Mathematics Elective

Mathematics Elective

Mathematics Elective

Mathematics Elective

Mathematics Units

Level 2 Units

MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2
MAB315	Operations Research 2
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB420	Computational Mathematics 2
MAB422	Mathematical Modelling
MAB461	Discrete Mathematics
MAB480	Introduction to Scientific Computation
MAB481	Visualisation and Data Analysis

Note: MAB311 Advanced Calculus and MAB312 Linear Algebra are mandatory units.

Level 3 Units - at least 4 units must be selected

MAB521	Applied Mathematics 3
MAB522	Computational Mathematics 3
MAB524	Statistical Inference
MAB525	Operations Research 3A
MAB533	Statistical Techniques
MAB536	Time Series Analysis
MAB613	Partial Differential Equations
MAB623	Financial Mathematics
MAB624	Applied Statistics 3
MAB625	Operations Research 3B
MAB640	Industry Project
MAB672	Advanced Mathematical Modelling
MAB681	Advanced Visualisation and Data Analysis

Note: MAB523 Introduction to Quality Management and MAB621 Discrete Mathematics do not contribute to the mandatory 48 credit points minimum from Level 3 Mathematics units.

Potential Careers:

Account Executive, Accountant, Actuary, Banker, Banking and Finance Professional, Business Analyst, Certified Practicing Accountant, Computer Game Programmer, Corporate Secretary, Economist, Financial Advisor/Analyst, Financial Project Manager, Funds Manager, Government Officer, Investment Manager, Market Research Manager, Mathematician, Quantitative Analyst, Risk Manager, Statistician, Stockbroker.

Bachelor of Arts/Bachelor of Information Technology (IX49)

Year offered: 2009
Admissions: No
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $2,601 (indicative) per semester
QTAC code: This course is no longer offered
Past rank cut-off: 73; Dfee: 68
Past OP cut-off: 13; Dfee: 15
OP Guarantee: Yes
Assumed knowledge: English (4, SA), and for games technology and security majors, Maths B (4, SA), or for all other majors, Maths A, B or C (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Course coordinator: Dr Iraphne Childs (Arts) Richard Thomas (IT)
Campus: Gardens Point and Kelvin Grove

Course description

In this course students complete the requirements of two separate degrees in Arts and Information Technology in four years. The focus of the arts component is social change with an emphasis on understanding societies and the impact of global, social, environmental and technological change on communities and individuals. In the IT component, there is a strong practical component with computing laboratory based units and project work comprising a significant part of the course,

Majors in the Arts component

In the Bachelor of Arts, students choose an multidisciplinary major from one of the following: international and global studies, society and change, ethics and human rights, community studies, or Australian studies.

Majors in the IT component

In the Bachelor of Information Technology, students can choose to major in business systems engineering, data bases, electronic business, games technology, information and knowledge management, information systems, IT management, intelligent systems, interactive media, network systems, security, software architecture, or web services and applications.

Career outcomes

Information technology professionals with a strong knowledge in languages, as well as deep understanding in areas such as international issuesÂ¿particularly cultures, ethics and human rightsÂ¿are highly valued by the information technology industry. The Arts component also provides students with a broad-based education and a range of transferable analytical, research and communication skills which will enrich studies in information technology and expand career choices.

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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Further Information

For further information regarding the IT component of this course please contact the course coordinator Mr Richard Thomas at enquiry.scitech@qut.edu.au or call 3138 2782

COURSE OVERVIEW

YEAR 1 SEMESTER 1	
INB103	Industry Insights
INB250	Systems Architecture
BA	null
BA	Discipline unit

YEAR 1 SEMESTER 2	
INB210	Databases
INB251	Networks
BA	Skills unit
BA	Discipline unit

YEAR 2 SEMESTER 1	
INB104	Building IT Systems
	Choose one unit from: Intermediate Level Elective list. This choice will replace ITB008 from 2009 course summary.
BA	Major unit (elective)
BA	Discipline or Minor unit

YEAR 2 SEMESTER 2	
INB270	Programming
INB271	The Web
BA	Major unit (elective)
BA	Discipline or minor unit

YEAR 3 SEMESTER 1	
	IT Major Unit
	IT Major Unit
BA	Major unit (elective)
BA	Discipline or Minor unit

YEAR 3 SEMESTER 2	
INB301	The Business of IT
	IT Major Unit
BA	Major unit (elective)
BA	Discipline or Minor unit

YEAR 4 SEMESTER 1	
INB302	Capstone Project
	IT Major Unit
BA	Major unit (elective)
BA	Elective unit

YEAR 4 SEMESTER 2	
	IT Major Unit
	IT Major Unit
BA	Major unit (elective)
BA	Elective unit

ARTS UNITS

FOR A LIST OF ARTS UNITS IN THIS DOUBLE DEGREE REFER TO QUT BACHELOR OF ARTS SINGLE DEGREE

Information Systems Major

Compulsory Units	
INB311	Enterprise Systems
INB340	Database Design
INB220	Business Analysis

IS Elective Units	
INB312	Enterprise Systems Applications
INB342	Enterprise Data Mining
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB320	Business Process Modelling
INB124	Information Systems Development
INB221	Technology Management

Network Systems Major

Compulsory Units	
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB255	Security

Electives	
INB312	Enterprise Systems Applications
INB365	Systems Programming
INB353	Wireless and Mobile Networks
INB355	Cryptology and Protocols

Software Architecture Major

Compulsory Units	
INB340	Database Design
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles

Electives	
	Choose 3 Electives
INB341	Software Development With Oracle
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
INB272	Interaction Design
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB320	Business Process Modelling
INB365	Systems Programming
INB370	Software Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
MAB281	Mathematics for Computer Graphics
	MAB281 is only to be used as a prereq for INB381
	null

Potential Careers:

Community Worker, Diplomat, Government Officer, Higher Education Worker, Information Officer, Policy Officer, Public Servant.

Bachelor of Information Technology/Bachelor of Laws (IX53)

Year offered: 2009
Admissions: Yes
CRICOS code: 066292D
Course duration (full-time): 5.5 Years
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419622
Past rank cut-off: 91
Past OP cut-off: 6
OP Guarantee: Yes
Assumed knowledge: English (4,SA), Maths A, B or C (4,SA)
Total credit points: 528
Standard credit points per full-time semester: 48
Course coordinator: IT: Mr Richard Thomas; Law: Dr Bill Dixon
Campus: Gardens Point

Course Description

This degree equips you to build and apply creative, innovative IT solutions across diverse industries. A hands-on, real world based curriculum gives you the opportunity to explore a wide range of areas within the two strands of this degree, and gain deep understanding within your chosen area speciality, such as networking, software engineering, data warehousing, business process modelling, enterprise systems, information management, web technologies, or digital societies. You will experience an innovative, hands-on approach to learning through projects where you develop IT systems. You will be able to gain entrepreneurial skills if you wish to learn how to develop an idea into a commercial opportunity. You learn to harness your creativity and people skills to maximise the impact of your technical know-how in the booming IT marketplace. It positions you for a challenging and rewarding career within the global economy. Full-time students are eligible for the Cooperative Education Program; paid industry work experience with credit towards your degree. Students are also offered many other work-integrated learning opportunities where you receive first-hand industry experience.

The defining nature of the QUT Law degree is its real-world applied nature which will equip you with the high quality knowledge and skills and that meet the needs of the legal profession, government, business and industry. In developing the Law degree the Faculty recognises that graduates are increasingly seeking a broad range of careers including, but not limited to, legal practice.

The flexible nature of the degree provides students with an opportunity to undertake a series of elective streams. These streams group legal content and legal skills units into alignment with the varied career destinations which a legal education opens to graduates and will allow you to study areas of the law that match your career aspirations.

OP Guarantee

The OP Guarantee will apply to this course.

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 graduateâs parchment. Instead, IX53 will have specialisations. The specialisation areas that will be available for students will include:
â¢ Business Process Management
â¢ Data Warehousing
â¢ Digital Societies
â¢ Enterprise Systems
â¢ Information Management
â¢ Network Systems
â¢ Software Engineering
â¢ Web Technologies

Entry Requirements

Year 12 or equivalent
Prerequisites: Nil
Assumed Knowledge: English (4,SA), Maths A, B or C (4,SA)
Primary Fields: A or B
Secondary Fields: C
OP Guarantee: Yes

International Students

English language requirements
In addition to the above academic entry requirements, international students must meet the Universityâs English language requirements of IELTS of 6.5 (with no lower than 6.0 for any one band).

Pathways to Futher Studies

In 2001, the Faculty introduced an accelerated Honours program to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year. The program allowed selected high achieving students the opportunity to undertake one postgraduate unit in the final semester of their a BIT degree (or double degree) which would be counted both for completion of the degree and towards the Honours program. The program also provided students with the opportunity to commence their Honours studies over the Summer Semester.

An alternative to the Honours program is the Master of Information Technology (Research). Students who complete a BIT degree (or double degree) with a grade point average equal to, or greater than 5 (7 point scale) and who have decided against enrolling in an Honours program, could undertake this course. In addition, students may wish to enrol in the 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.

Professional Recognition

The QUT Law degree is an approved degree for the purposes of the Legal Practitioners Admission Rules.

Accordingly, it enables graduates to satisfy the academic requirements for admission to practise as a solicitor and/or barrister in all Australian states and territories. The QUT LLB degree qualification is also recognised for admission purposes in West and East Malaysia, Fiji and Papua New Guinea.

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Further Information

For further information on the IT component of this course please contact the course coordinator Mr Richard Thomas at enquiry.scitech@qut.edu.au or call 3138 2782

IX53 - Bachelor of Information Technology/Bachelor of Laws Course structure

Year 1, Semester 1

INB101	Impact of IT
INB102	Emerging Technology
LWB145	Legal Foundations A
LWB147	Torts A

Year 1, Semester 2

INB103	Industry Insights
INB104	Building IT Systems
LWB146	Legal Foundations B
LWB148	Torts B

Year 2, Semester 1

	IT Breadth Option
	IT Breadth Option
LWB136	Contracts A
LWB238	Fundamentals of Criminal Law

Year 2, Semester 2

	IT Breadth Option
	IT Breadth Option
LWB137	Contracts B
LWB239	Criminal Responsibility

Year 3, Semester 1

INB201	Scalable Systems Development
	IT Specialist Option
LWB240	Principles of Equity

LWB243	Property Law A

Year 3, Semester 2

INB300	Professional Practice in IT
	IT Specialist Option
LWB241	Trusts
LWB244	Property Law B

Year 4, Semester 1

INB301	The Business of IT
	IT Specialist Option
LWB242	Constitutional Law
LWB432	Evidence

Year 4, Semester 2

INB302	Capstone Project
	IT Specialist Option
LWB334	Corporate Law
	Law Elective

Year 5, Semester 1

LWB335	Administrative Law
LWB431	Civil Procedure
	Law Elective
	Law Elective

Year 5, Semester 2

LWB433	Professional Responsibility
	Law Elective
	Law Elective
	Law Elective

Year 6, Semester 1

	Law Elective
	Law Elective
	Law Elective
	Law Elective

IT Breadth Option Unit List

IT Breadth Option Units

You must complete four (4) units from the following list. You should not commence these units until you have completed INB101, INB102, INB103 and INB104.

INB120	Corporate Systems
INB210	Databases
INB220	Business Analysis
INB250	Systems Architecture
INB251	Networks
INB255	Security
INB270	Programming

| INB271 | The Web |
| INB272 | Interaction Design |

IT Specialisation Option Unit List

You must complete four (4) 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. The units are grouped in areas to assist you in focusing your studies.

1.	Enterprise Systems:
INB123	Project Management Practice
INB221	Technology Management
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
2.	Web Technologies:
INB313	Electronic Commerce Site Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
3.	Business Process Management:
INB320	Business Process Modelling
INB321	Business Process Management
INB322	Information Systems Consulting
INB323	Smart Services
4.	Information Management:
INB330	Information Management
INB331	Management Issues for Info Professionals
INB332	Information Retrieval
INB333	Information Programs
INB334	Information Issues and Values
INB335	Information Resources
5.	Data Warehousing:
INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining
INB343	Advanced Data Mining and Data Warehousing
6.	Network Systems:
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB353	Wireless and Mobile Networks
7.	Software Engineering:
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles
INB374	Enterprise Software Architecture
8.	Ungrouped:
INB204	Special Topic 1
INB205	Special Topic 2
INB304	Special Topic 3
INB305	Special Topic 4
INB306	Project 1
INB307	Project 2
INB308	Project 3
INB355	Cryptology and Protocols
INB365	Systems Programming
INB860	Computational Intelligence for Control and Embedded Systems
9.	Digital Environments:
INB345	Mobile Devices
INB346	Enterprise 2.0
INB347	Web 2.0 Applications
INB334	Information Issues and Values

Law Elective Information

Further information regarding Law Electives can be found at: http://www.law.qut.edu.au/study/courses/ugrad/lselect.jsp

Potential Careers:

Barrister, Crown Law Officer, Database Manager, Electronic Commerce Developer, In-House Lawyer, Programmer, Public Servant, Software Engineer, Solicitor, Systems Analyst, Systems Manager, Systems Programmer, Web Designer.

Bachelor of Engineering (Electrical)/Bachelor of Information Technology (IX54)

Year offered: 2009
Admissions: Yes
CRICOS code: 006384G
Course duration (full-time): 5 years
Domestic fees (per credit point): Commonwealth Supported Place; Full fee tuition 2008: $218 per credit point *(subject to annual review)*
Domestic fees (indicative): 2008: Full fee tuition $20,928; CSP $6,960
International Fees (per semester): 2009: $11,000 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419512
Past rank cut-off: 80
Past OP cut-off: 11
OP Guarantee: Yes
Assumed knowledge: English (4,SA), Maths B or C (4,SA)
Preparatory studies: Chemistry, Maths C, Physics (recommended)
Total credit points: 480
Course coordinator: Dr R.Mahalinga-Iyer (Engineering), Mr Richard Thomas (Information Technology)
Discipline coordinator: Dr Jasmine Banks (Engineering)
Campus: Gardens Point

Course Description

This degree equips you to build and apply creative, innovative IT solutions across diverse industries. A hands-on, real world based curriculum gives you the opportunity to explore a wide range of areas within the two strands of this degree, and gain deep understanding within your chosen area speciality, such as networking, software engineering, data warehousing, business process modelling, enterprise systems, information management, web technologies, or digital societies. You will experience an innovative, hands-on approach to learning through projects where you develop IT systems. You will be able to gain entrepreneurial skills if you wish to learn how to develop an idea into a commercial opportunity. You learn to harness your creativity and people skills to maximise the impact of your technical know-how in the booming IT marketplace. It positions you for a challenging and rewarding career within the global economy. Full-time students are eligible for the Cooperative Education Program; paid industry work experience with credit towards your degree. Students are also offered many other work-integrated learning opportunities where you receive first-hand industry experience.

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 double degree produces computer and electronic engineers especially suited for the development and application of electronic systems, including micro, mini and mainframe computer systems in all areas of industry.

Entry Requirements

Year 12 or equivalent
Prerequisites: Nil
Assumed Knowledge: English (4,SA), Maths A, B or C (4,SA)
Primary Fields: B or C
Secondary Fields: B or C
OP Guarantee: Yes

Special Course Requirements

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

International Students

English language requirements
In addition to the above academic entry requirements, international students must meet the Universityâs English language requirements of IELTS of 6.5 (with no lower than 6.0 for any one band).

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).

Career Outcomes

Many graduates find employment in government instrumentalities such as communications, railways, electricity supply, hospitals, transport and in private organisations that are using electronics, electronic systems, computers and microprocessors to monitor, control, communicate and optimise processes and production.

Cooperative Education Program

ITâs 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 youâre 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

This degree meets the requirements for membership of Engineers Australia and the Institution of Radio and Electronics Engineers Australia. Graduates of the Bachelor of Information Technology component meet the knowledge requirements for admission to the Australian Computer Society (ACS).

Pathways to Futher Studies

In 2001, the Faculty introduced an accelerated Honours program to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year. The program allowed selected high achieving students the opportunity to undertake one postgraduate unit in the final semester of their a BIT degree (or double degree) which would be counted both for completion of the degree and towards the Honours program. The program also provided students with the opportunity to commence their Honours studies over the Summer Semester.

An alternative to the Honours program is the Master of Information Technology (Research). Students who complete a BIT degree (or double degree) with a grade point average equal to, or greater than 5 (7 point scale) and who have decided against enrolling in an Honours program, could undertake this course. In addition, students may wish to enrol in the 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.

Deferment
QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Further Information
Engineering Phone +61 7 3138 1993, Fax +61 7 3138 1516, email: bee.enquiries@qut.edu.au
Faculty of Science and Technology Phone +61 7 3138 2782, Fax +61 7 3138 2703, email: enquiry.scitech@qut.edu.au

IX54 Bachelor of Engineering (Electrical)/Bachelor of Information Technology Course structure

Year 1, Semester 1

BEB100	Introducing Professional Learning
	OR
INB103	Industry Insights
INB104	Building IT Systems
MAB131	Engineering Mathematics 1A
	OR
MAB180	Engineering Mathematics 1B
PCB136	Engineering Physics 1C

Year 1, Semester 2

BEB200	Introducing Sustainability
ENB103	Electrical Engineering
INB102	Emerging Technology

MAB132	Engineering Mathematics 2A
	OR
MAB182	Engineering Mathematics 2B

Year 2, Semester 1

ENB101	Engineering Mechanics 1
ENB240	Introduction To Electronics
INB101	Impact of IT
MAB233	Engineering Mathematics 3

Year 2, Semester 2

ENB104	Engineering Materials
ENB243	Linear Circuits and Systems
INB270	Programming
	IT Breadth Option Unit

Year 3, Semester 1

ENB242	Introduction To Telecommunications
ENB301	Instrumentation and Control
ENB340	Power Systems and Machines
	IT Breadth Option Unit

Year 3, Semester 2

ENB241	Software Systems Design
ENB244	Microprocessors and Digital Systems
ENB245	Introduction To Design and Professional Practice
	IT Breadth Option Unit

Year 4, Semester 1

ENB342	Signals, Systems and Transforms
ENB343	Fields, Transmission and Propagation
ENB350	Real-time Computer-based Systems
INB201	Scalable Systems Development

Year 4, Semester 2

ENB344	Industrial Electronics
ENB345	Advanced Design and Professional Practice
ENB346	Digital Communications
	IT Specialist Option Unit

Year 5, Semester 1

BEB701	Work Integrated Learning 1
BEB801	Project 1
	OR
INB309-1	Major Project
INB301	The Business of IT
	IT Specialist Option Unit

Year 5, Semester 2

BEB802	Project 2
	OR

INB309-2	Major Project	null
	IT Specialist Option Unit	null
	IT Specialist Option Unit	null
	EE Elective Unit	null
	OR	null
	IT Elective Unit	null
		null
		null
		null
		null
		null

IX54 Elective Options

	Electrical Engineering Electives	
	Any 3rd or 4th year electrical ENB unit subject to the completion of all prerequisites for that unit.	null
ENB352	Communication Environments For Embedded Systems	null
ENB440	RF and Applied Electromagnetics	null
ENB441	Applied Image Processing	null
ENB445	RF Communication Technologies	null
ENB446	Wireless Communications	null
ENB448	Signal Processing and Filtering	null
ENB452	Advanced Power Systems Analysis	null
ENB453	Power Equipment and Utilisation	null
ENB454	Power System Management	null
ENB455	Power Electronics	null
ENB456	Energy	null
ENB457	Controls, Systems and Applications	null
ENB458	Modern Control Systems	null

	Information Technology Electives	
	Any INB3xx unit subject to the completion of all prerequisites for that unit. Please see below for the list of INB3xx units	null
	Please see http://www.studentservices.qut.edu.au/pdfs/IT_elective_%20list.pdf for a full list of IT Electives available for 2009	null
	null	null
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	null	null

IT Breadth Option Unit List

	IT Breadth Option Units	
	You must complete four (4) units from the following list. You should not commence these units until you have completed INB101, INB102, INB103 and INB104.	
INB120	Corporate Systems	
INB210	Databases	
INB220	Business Analysis	
INB250	Systems Architecture	
INB251	Networks	
INB255	Security	
INB270	Programming	
INB271	The Web	
INB272	Interaction Design	

IT Specialisation Option Unit List

You must complete four (4) 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. The units are grouped in areas to assist you in focusing your studies.

1.   Enterprise Systems:

INB123   Project Management Practice

INB221   Technology Management

INB311   Enterprise Systems

INB312   Enterprise Systems Applications

2.   Web Technologies:

INB313   Electronic Commerce Site Development

INB373   Web Application Development

INB374   Enterprise Software Architecture

INB385   Multimedia Systems

INB386   Advanced Multimedia Systems

3.   Business Process Management:

INB320   Business Process Modelling

INB321   Business Process Management

INB322   Information Systems Consulting

INB323   Smart Services

4.   Information Management:

INB330   Information Management

INB331   Management Issues for Info Professionals

INB332   Information Retrieval

INB333   Information Programs

INB334   Information Issues and Values

INB335   Information Resources

5.   Data Warehousing:

INB340   Database Design

INB341   Software Development With Oracle

INB342   Enterprise Data Mining

INB343   Advanced Data Mining and Data Warehousing

6.   Network Systems:

INB350   Internet Protocols and Services

INB351   Computer Network Administration

INB352   Network Planning and Deployment

INB353   Wireless and Mobile Networks

7.   Software Engineering:

INB370   Software Development

INB371   Data Structures and Algorithms

INB372   Software Engineering Principles

INB374   Enterprise Software Architecture

8.   Ungrouped:

INB204   Special Topic 1

INB205   Special Topic 2

INB304   Special Topic 3

INB305   Special Topic 4

INB306   Project 1

INB307   Project 2

INB308   Project 3

INB355   Cryptology and Protocols

INB365   Systems Programming

INB860   Computational Intelligence for Control and Embedded Systems

9.   Digital Environments:

INB345   Mobile Devices

INB346   Enterprise 2.0

INB347   Web 2.0 Applications

INB334   Information Issues and Values

Bachelor of Applied Science(Study Area A)/Bachelor of Information Technology (IX55)

Year offered: 2009
Admissions: Yes
CRICOS code: 020327M
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
International Fees (per semester): 2009: $11,000 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419302
Past rank cut-off: 75
Past OP cut-off: 13
OP Guarantee: Yes
Assumed knowledge: English (4,SA), Maths B (4,SA)
Total credit points: 384
Course coordinator: Dr Perry Hartfield (Science), Mr Richard Thomas (IT)
Discipline coordinator: Dr Perry Hartfield (Biochemistry); Dr Marion Bateson (Biotechnology); Dr Robert Johnson (Chemistry); Dr Ian Williamson (Ecology); Dr Robin Thwaites (Environmental Science); Dr Emad Kiriakous (Forensic Science); Dr Gary Huftile (Geoscience); Dr Christine Knox (Microbiology); Dr Greg Michael (Physics)
Campus: Gardens Point

Course Description

The science component of the course offers students a choice of one of nine majors: Biochemistry, Biotechnology, Chemistry, Ecology, Environmental Science, Forensic Science, Geoscience, Microbiology and Physics. See the Bachelor of Applied Science (SC01) course information for more details. So that students can complete the double degree in a shorter period of time, co-majors are to be taken from the information technology program.

This degree equips you to build and apply creative, innovative IT solutions across diverse industries. A hands-on, real world based curriculum gives you the opportunity to explore a wide range of areas within the two strands of this degree, and gain deep understanding within your chosen area speciality, such as networking, software engineering, data warehousing, business process modelling, enterprise systems, information management, web technologies, or digital societies. You will experience an innovative, hands-on approach to learning through projects where you develop IT systems. You will be able to gain entrepreneurial skills if you wish to learn how to develop an idea into a commercial opportunity. You learn to harness your creativity and people skills to maximise the impact of your technical know-how in the booming IT marketplace. It positions you for a challenging and rewarding career within the global economy. Full-time students are eligible for the Cooperative Education Program; paid industry work experience with credit towards your degree. Students are also offered many other work-integrated learning opportunities where you receive first-hand industry experience.

Recommended Study

At least one of the sciences. For the majors in biochemistry, biotechnology, forensic science and microbiology - Biological Science and Chemistry are recommended; for the major in physics - Maths C is recommended.

Career Outcomes

Recent rapid technological advances in scientific equipment have led to a high demand for graduates qualified in both a science discipline and information technology. This double degree qualifies you for this niche area of employment. Alternatively you may pursue a career as a science professional with the added dimension of advanced technological skills. Or you may choose to work in an information technology specialist area and find that your broad range of skills makes you particularly attractive to employers in industries at the forefront of scientific discoveries. IT is now an integral part of all commercial, industrial and government activities.

Professional Recognition

Graduates will satisfy the requirements for membership in the relevant professional body for their chosen science major. See the Bachelor of Applied Science course for details. Graduates are also eligible for membership of the Australian Computer Society (ACS).

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:
â¢ Business Process Management
â¢ Data Warehousing
â¢ Digital Societies
â¢ Enterprise Systems
â¢ Information Management
â¢ Network Systems
â¢ Software Engineering
â¢ Web Technologies

Entry Requirements

Year 12 or equivalent
Prerequisites: Nil
Primary Fields: B or C
Secondary Fields: B or C

International Students

English language requirements
In addition to the above academic entry requirements, international students must meet the University's English language requirements of IELTS of 6.5 (with no lower than 6.0 for any one band).

Cooperative Education

The School of ITâs 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 youâre learning in your degree.

Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNiTAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the Cooperative Education Program.

Pathways to Further Studies

In 2001, an accelerated Honours program was introduced to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year. The program allowed selected high achieving students the opportunity to undertake one postgraduate unit in the final semester of their 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.

Contact Details

Science Coordinator
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Email: p.hartfield@qut.edu.au

Information Technology Coordinator
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Email: enquiry.scitech@qut.edu.au

Discipline Coordinators

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Forensic Science
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Email: e.kiriakous@qut.edu.au

Geoscience
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Email: g.huftile@qut.edu.au

Microbiology
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Phone: +61 7 3138 2301
Email: c.knox@qut.edu.au

Physics
Dr Greg Michael
Phone: +61 7 3138 1584
Email: g.michael@qut.edu.au top

IT Breadth Option Unit List

IT Breadth Option Units	
	You must complete four (4) units from the following list. You should not commence these units until you have completed INB101, INB102, INB103 and INB104.
INB120	Corporate Systems
INB210	Databases
INB220	Business Analysis
INB250	Systems Architecture
INB251	Networks
INB255	Security
INB270	Programming
INB271	The Web
INB272	Interaction Design

IT Specialisation Option Unit List

IT Specialist Option Units	
	You must complete four (4) 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. The units are grouped in areas to assist you in focusing your studies.
1.	Enterprise Systems:
INB123	Project Management Practice
INB221	Technology Management

INB311	Enterprise Systems
INB312	Enterprise Systems Applications
2.	Web Technologies:
INB313	Electronic Commerce Site Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
3.	Business Process Management:
INB320	Business Process Modelling
INB321	Business Process Management
INB322	Information Systems Consulting
INB323	Smart Services
4.	Information Management:
INB330	Information Management
INB331	Management Issues for Info Professionals
INB332	Information Retrieval
INB333	Information Programs
INB334	Information Issues and Values
INB335	Information Resources
5.	Data Warehousing:
INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining
INB343	Advanced Data Mining and Data Warehousing
6.	Network Systems:
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB353	Wireless and Mobile Networks
7.	Software Engineering:
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles
INB374	Enterprise Software Architecture
8.	Ungrouped:
INB204	Special Topic 1
INB205	Special Topic 2
INB304	Special Topic 3
INB305	Special Topic 4
INB306	Project 1
INB307	Project 2
INB308	Project 3
INB355	Cryptology and Protocols
INB365	Systems Programming
INB860	Computational Intelligence for Control and Embedded Systems
9.	Digital Environments:

INB345	Mobile Devices
INB346	Enterprise 2.0
INB347	Web 2.0 Applications
INB334	Information Issues and Values

Course structure - Major in Biochemistry

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2	
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation

Year 3, Semester 2	
LQB481	Biochemical Pathways and Metabolism
LQB483	Molecular Biology Techniques

Year 4, Semester 1	
LQB581	Functional Biochemistry
LQB582	Biomedical Research Technologies

Year 4, Semester 2	
LQB681	Biochemical Research Skills
LQB682	Protein Biochemistry and Bioengineering

Course structure - Major in Biotechnology

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems

Either

MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

| SCB122 | Cell and Molecular Biology |
| SCB123 | Physical Science Applications |

| LQB381 | Biochemistry: Structure and Function |
| LQB383 | Molecular and Cellular Regulation |

| LQB483 | Molecular Biology Techniques |
| LQB484 | Introduction to Genomics and Bioinformatics |

	Select TWO units from:
LQB583	Genetic Research Technology
LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation

	Select TWO units from:
LQB682	Protein Biochemistry and Bioengineering
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions

Course structure - Major in Chemistry

SCB111	Chemistry 1
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

| SCB112 | Cellular Basis of Life |
| SCB121 | Chemistry 2 |

| MAB100 | Mathematical Sciences 1A |
| SCB110 | Science Concepts and Global Systems |

| SCB123 | Physical Science Applications |
| SCB131 | Experimental Chemistry |

| PQB312 | Analytical Chemistry For Scientists and Technologists |

| PQB331 | Structure and Bonding |

| PQB401 | Reaction Kinetics, Thermodynamics and Mechanisms |
| PQB442 | Chemical Spectroscopy |

| PQB502 | Materials Chemistry and Characterisation |
| PQB531 | Organic Mechanisms and Synthesis |

| PQB631 | Advanced Inorganic Chemistry |
| PQB642 | Chemical Research |

Course structure - Major in Ecology

| SCB111 | Chemistry 1 |
| SCB112 | Cellular Basis of Life |

| SCB120 | Plant and Animal Physiology |
| SCB122 | Cell and Molecular Biology |

SCB110	Science Concepts and Global Systems
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

| NQB201 | Planet Earth |
| NQB202 | History of Life on Earth |

| NQB302 | Earth Surface Systems |
| NQB321 | Ecology |

| NQB421 | Experimental Design |
| NQB422 | Genetics and Evolution |

| NQB521 | Population Genetics and Molecular Ecology |
| NQB523 | Population Management |

| NQB622 | Conservation Biology |
| NQB623 | Ecological Systems |

Course structure - Major in Environmental Science

| SCB111 | Chemistry 1 |
| SCB112 | Cellular Basis of Life |

| SCB120 | Plant and Animal Physiology |
| SCB121 | Chemistry 2 |

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

| NQB202 | History of Life on Earth |
| SCB123 | Physical Science Applications |

Year 3, Semester 1

| NQB302 | Earth Surface Systems |
| NQB321 | Ecology |

Year 3, Semester 2

| NQB403 | Soils and the Environment |
| NQB421 | Experimental Design |

Year 4, Semester 1

| NQB501 | Environmental Modelling |
| NQB502 | Field Mapping and Monitoring of Natural Resources |

Year 4, Semester 2

| NQB601 | Sustainable Environmental Management |
| NQB602 | Environmental Chemistry |

Course structure - Major in Forensic Science

Year 1, Semester 1

| SCB111 | Chemistry 1 |
| SCB112 | Cellular Basis of Life |

Year 1, Semester 2

| SCB121 | Chemistry 2 |
| SCB122 | Cell and Molecular Biology |

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

| SCB123 | Physical Science Applications |

| SCB131 | Experimental Chemistry |

Year 3, Semester 1

| LQB383 | Molecular and Cellular Regulation |
| SCB384 | Forensic Sciences - From Crime Scene to Court |

Year 3, Semester 2

| JSB979 | Forensic Scientific Evidence |
| PQB312 | Analytical Chemistry For Scientists and Technologists |

Year 4, Semester 1

| PQB513 | Instrumental Analysis |
| PQB584 | Forensic Physical Evidence |

Year 4, Semester 2

| LQB680 | Forensic DNA Profiling |
| PQB684 | Forensic Analysis |

Course structure - Major in Geoscience

Year 1, Semester 1

| SCB111 | Chemistry 1 |
| SCB112 | Cellular Basis of Life |

Year 1, Semester 2

| NQB201 | Planet Earth |
| SCB123 | Physical Science Applications |

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

| NQB202 | History of Life on Earth |
| SCB222 | Exploration of the Universe |

Year 3, Semester 1

| NQB311 | Mineralogy |
| NQB314 | Sedimentary Geology |

Year 3, Semester 2

| NQB411 | Petrology of Igneous and Metamorphic Rocks |
| NQB412 | Structural Geology and Field Methods |

Year 4, Semester 1

| NQB502 | Field Mapping and Monitoring of Natural Resources |
| NQB513 | Geophysics |

Year 4, Semester 2

NQB602   Environmental Chemistry
NQB614   Groundwater Systems

Course structure - Major in Microbiology

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2	
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB386	Microbial Structure and Function

Year 3, Semester 2	
LQB483	Molecular Biology Techniques
LQB486	Clinical Microbiology 1

Year 4, Semester 1	
LQB586	Clinical Microbiology 2
LQB587	Applied Microbiology 1: Water Air and Soil

Year 4, Semester 2	
LQB686	Microbial Technology and Immunology
LQB687	Applied Microbiology 2: Food and Quality Assurance

Course structure - Major in Physics

Year 1, Semester 1	
MAB111	Mathematical Sciences 1B
SCB111	Chemistry 1

Year 1, Semester 1	
MAB112	Mathematical Sciences 1C
PQB250	Mechanics and Electromagnetism

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
SCB112	Cellular Basis of Life

Year 2, Semester 2	
MAB220	Computational Mathematics 1
PQB251	Waves and Optics

Year 3, Semester 1	
MAB311	Advanced Calculus
PQB350	Thermodynamics of Solids and Gases

Year 3, Semester 2	
PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation

Year 4, Semester 1	
PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques

Year 4, Semester 2	
PQB650	Advanced Theoretical Physics
PQB651	Experimental Physics

Potential Careers:

Analytical Chemist, Astrophysicist, Biochemist, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Data Communications Specialist, Environmental Scientist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, Industrial Chemist, Laboratory Technician (Chemistry), Marine Scientist, Medical Physicist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Network Administrator, Network Manager, Physicist, Plant Biotechnologist, Population Ecologist, Virologist.

Bachelor of Creative Industries/Bachelor of Information Technology (IX56)

Year offered: 2009
Admissions: Yes
CRICOS code: 059227E
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,332 (indicative) per semester
International Fees (per semester): 2009: $10,000 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 409872
Past rank cut-off: 75
Past OP cut-off: 13
OP Guarantee: Yes
Assumed knowledge: English (4,SA), Maths A, B or C (4,SA)
Total credit points: 384
Standard credit points per full-time semester: 48
Course coordinator: IT: Mr Richard Thomas; Creative Industries: Head, Undergraduate Studies (cifug@qut.edu.au)
Campus: Gardens Point and Kelvin Grove

Study Areas

IX56 will not have nominated majors and minors and consequently there will not be a Study Area A shown on a graduateâs parchment. Instead, IX56 will have specialisations. The specialisation areas that will be available for students will include:
â¢ Business Process Management
â¢ Data Warehousing
â¢ Digital Societies
â¢ Enterprise Systems
â¢ Information Management
â¢ Network Systems
â¢ Software Engineering
â¢ Web Technologies

Course Description

This degree equips you to build and apply creative, innovative IT solutions across diverse industries. A hands-on, real world based curriculum gives you the opportunity to explore a wide range of areas within the two strands of this degree, and gain deep understanding within your chosen area speciality, such as networking, software engineering, data warehousing, business process modelling, enterprise systems, information management, web technologies, or digital societies. You will experience an innovative, hands-on approach to learning through projects where you develop IT systems. You will be able to gain entrepreneurial skills if you wish to learn how to develop an idea into a commercial opportunity. You learn to harness your creativity and people skills to maximise the impact of your technical know-how in the booming IT marketplace. It positions you for a challenging and rewarding career within the global economy. Full-time students are eligible for the Cooperative Education Program; paid industry work experience with credit towards your degree. Students are also offered many other work-integrated learning opportunities where you receive first-hand industry experience.

Entry Requirements

Year 12 or equivalent
Prerequisites: Nil
Assumed Knowledge: English (4,SA), Maths A, B or C (4,SA)
Primary Fields: B
Secondary Fields: C
OP Guarantee: Yes

International Students

English language requirements
In addition to the above academic entry requirements, international students must meet the Universityâs English language requirements of IELTS of 6.5 (with no lower than 6.0 for any one band).

Pathways to Futher Studies

In 2001, an accelerated Honours program was introduced to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year. The program allowed selected high achieving students the opportunity to undertake one postgraduate unit in the final semester of their a BIT degree (or double degree) which would be counted both for completion of the degree and towards the Honours program. The program also provided students with the opportunity to commence their Honours studies over the Summer Semester.

An alternative to the Honours program is the Master of Information Technology (Research). Students who complete a BIT degree (or double degree) with a grade point average equal to, or greater than 5 (7 point scale) and who have decided against enrolling in an Honours program, could undertake this course. In addition, students may wish to enrol in the 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.

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 âTranslation Unit Codesâ column you are not permitted to enrol in the listed new code.

Cooperative Education

The School of ITâs 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 youâre 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.

IX56 - Bachelor of Creative Industries/Bachelor of Information Technology Course structure

Year 1, Semester 1	
INB101	Impact of IT
INB102	Emerging Technology
KKB101	Creative Industries: People and Practices
KPB150	Foundations of Multi-platform Production
OR	null
KVB104	Photomedia and Artistic Practice

Year 1, Semester 2	
INB103	Industry Insights
INB104	Building IT Systems
KCB103	Strategic Speech Communication
KKB102	Creative Industries: Making Connections

Year 2, Semester 1	
	IT Breadth Option Unit
	IT Breadth Option Unit
KKB221	Approaching Interdisciplinarity
SELECT:	CI Second major: First Unit

Year 2, Semester 2	
	IT Breadth Option Unit
	IT Breadth Option Unit
KKB222	Interdisciplinarity in Practice
SELECT:	CI Second major: Second Unit

Year 3, Semester 1	
INB201	Scalable Systems Development
	IT Specialisation Option Unit
SELECT:	CI Second major: Third Unit
SELECT:	CI Second major: Fourth Unit

Year 3, Semester 2	
INB300	Professional Practice in IT
	IT Specialisation Option Unit
SELECT:	CI Second major: Fifth Unit
SELECT:	Transitions to New Professional Environments Unit

Year 4, Semester 1	
INB301	The Business of IT
	IT Specialisation Option Unit
SELECT:	CI Second major: Sixth Unit
SELECT:	Transitions to New Professional Environments Unit

Year 4, Semester 2	

INB302	Capstone Project
	IT Specialisation Option Unit
SELECT:	CI Second major: Seventh Unit
SELECT:	CI Second major: Eight Unit

IT Breadth Option Unit List

IT Breadth Option Units	
	You must complete four (4) units from the following list. You should not commence these units until you have completed INB101, INB102, INB103 and INB104.
INB120	Corporate Systems
INB210	Databases
INB220	Business Analysis
INB250	Systems Architecture
INB251	Networks
INB255	Security
INB270	Programming
INB271	The Web
INB272	Interaction Design

IT Specialisation Option Unit List

IT Specialist Option Units	
	You must complete four (4) 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. The units are grouped in areas to assist you in focusing your studies.
1.	Enterprise Systems:
INB123	Project Management Practice
INB221	Technology Management
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
2.	Web Technologies:
INB313	Electronic Commerce Site Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
3.	Business Process Management:
INB320	Business Process Modelling
INB321	Business Process Management
INB322	Information Systems Consulting
INB323	Smart Services
4.	Information Management:
INB330	Information Management
INB331	Management Issues for Info Professionals
INB332	Information Retrieval
INB333	Information Programs

INB334	Information Issues and Values
INB335	Information Resources
5.	Data Warehousing:
INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining
INB343	Advanced Data Mining and Data Warehousing
6.	Network Systems:
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB353	Wireless and Mobile Networks
7.	Software Engineering:
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles
INB374	Enterprise Software Architecture
8.	Ungrouped:
INB204	Special Topic 1
INB205	Special Topic 2
INB304	Special Topic 3
INB305	Special Topic 4
INB306	Project 1
INB307	Project 2
INB308	Project 3
INB355	Cryptology and Protocols
INB365	Systems Programming
INB860	Computational Intelligence for Control and Embedded Systems
9.	Digital Environments:
INB345	Mobile Devices
INB346	Enterprise 2.0
INB347	Web 2.0 Applications
INB334	Information Issues and Values

Creative Industries Second Majors

Advertising

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

AMB200	Consumer Behaviour
AMB220	Advertising Theory and Practice
AMB221	Advertising Copywriting
AMB319	Media Planning
AMB320	Advertising Management
AMB339	Advertising Campaigns
AMB330	Advertising Planning Portfolio
BSB126	Marketing

Animation

KIB105	Animation and Motion Graphics
KIB108	Animation History and Practices
KIB203	Introduction to 3D Computer Graphics
KIB225	Character Development, Conceptual Design and Animation Layout
KIB316	Virtual Environments
KIB325	Real-Time 3D Computer Graphics
KVB105	Drawing for Design
KVB106	Drawing for Animation

Art and Design History

Description: This co-major equips you with the educational base necessary for a career in the arts professions, such as curatorial work, art criticism and arts administration. It offers a coherent and sequential set` of units that provide a platform for a research-based study of the visual arts, design and architecture. In conjunction with further study, this co-major will assist in preparing you for work as a professional in these disciplines.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

DAB325	Architecture in the 20th Century
DAB420	Architecture, Culture and Space
DEB102	Introducing Design History
KVB102	Modernism
KVB103	Australian Art
KVB108	Contemporary Asian Visual Culture
KVB211	Post 1945 Art
KVB212	Australian Art, Architecture and Design
KVB304	Contemporary Art Issues
KVB306	Video Art and Culture

Communication Design

*continuing students only

Description: The aim of this co-major is to

provide you with skills and knowledge in the domain of Communication Design. The co-major provides an introduction to the principles and practice of Communication Design, and the practical use of media technologies. Foundations of Communication Design and Media Technology units provide both a practical and theoretical basis for the studio units. Design Studio units situate the knowledge and skills gained from the first-level (100 coded) units into practice in a production / project setting, in the application areas of web development and interactive multimedia respectively.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KIB101	Visual Communication
KIB102	Visual Interactions
KIB103	Introduction to Web Design and Development
KIB104	Digital Media
KIB205	Programming for Visual Designers and Artists
KIB214	Design for Interactive Media
KIB216	Advanced Web Design
KIB230	Interface and Information Design

Creative and Professional Writing

Description: The aim of this co-major is to prepare students to graduate with adequate skills and knowledge in the area of creative and professional writing; to provide a thorough grounding in a variety of genres that include fiction, creative non-fiction, media writing and corporate writing and editing, thereby equipping graduates with the versatility required of professional writers; to enhance the critical, analytical and peer-reviewing skills of students; to provide and understanding of creative writing in its social and generic contexts.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KWB101	Introduction to Creative Writing
KWB102	Media Writing
KWB103	Persuasive Writing
KWB104	Creative Writing: The Short Story
KWB106	Corporate Writing and Editing
KWB107	Creative Non-Fiction
KWB206	Youth and Children's Writing
KWB207	Great Books: Creative Writing Classics
KWB211	Stylistics and Poetics
KWB303	Writing and Publishing Industry
KWB313	Novel and Memoir

Dance

Description: This co-major aims to provide a broad grounding in practical and theoretical aspects of dance. You will gain skills in contemporary dance, ballet, commercially driven genres, choreography and critical thinking and writing together with an understanding of the social and historical context of ballet, contemporary dance, and popular and world dance.

Assumed Knowledge: Previously acquired knowledge or skill IS required for you to undertake this co-major. It is essential that you be physically able, fit and have basic knowledge in a dance technique, either ballet, jazz or contemporary to undertake the practical units.

KDB103	Dance Technique Studies 1
KDB104	Dance Technique Studies 2
KDB105	Architecture of the Body
KDB106	Dance Analysis
KDB107	Choreographic Studies 1
KDB108	World Dance
KDB109	Funk, Tap and all that Jazz
KDB110	Deconstructing Dance in History
KDB204	Australian Dance
KDB205	Dance in Education
KDB225	Music Theatre Skills

Digital Media

Description: Online and interactive technologies now dominate creative and professional life. This co-major provides you with the opportunity to develop websites, multimedia projects, wikis and blogs, as well as allowing you to understand the guiding principals behind these new modes of communication and creative practice.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KCB101	Communication in the New Economy
KCB102	Media and Society: From Printing Press to Internet
	OR
KJB101	Digital Journalism
KCB104	Media and Communications Industries
	OR
KPB106	Australian Television
KCB201	New Media 1: Information and Knowledge
KCB202	New Media 2: Applications and Implications
KCB203	Consumer Cultures
KIB101	Visual Communication
KIB103	Introduction to Web Design and Development
KVB306	Video Art and Culture

Drama

Description: The co-major offers a balance of performance theory and practice. It is designed as a learning sequence, beginning with introductory concepts and practices, through intermediate and on to advanced learning. Underpinning the co-major is a twin focus on contemporary performance-making and events

management. Both of these areas are balanced by studies in theatre history and theory. Core topics include acting; directing; twentieth-century performance theory and practice; and events management.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KTB101	20th Century Performance
KTB103	Performing Skills 1: Character and Scene
KTB104	Performance Innovation
KTB106	Performing Skills 2: Style and Form
KTB204	Understanding Performance
KTB207	Staging Australia
KTB210	Creative Industries Management
KTB211	Creative Industries Events and Festivals
KTB305	The Entrepreneurial Artist
KTB306	Directing for Performance Events and Festivals

Entrepreneurship

Description: To provide students with an introduction to basic business principles as well as the innovation, development, production and entrepreneurial activities required when starting a new business. Students who do the extended eight unit set will be able to supplement this with a range of broader business administration and promotional skills particularly in the marketing and management areas.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

AMB230	Digital Promotions
AMB240	Marketing Planning and Management
AMB251	Innovation and Brand Management
BSB115	Management, People and Organisations
BSB126	Marketing
EFB210	Finance 1
IBB213	International Marketing
MGB207	Human Resource Issues and Strategy
MGB216	Managing Technology, Innovation and Knowledge
MGB324	Managing Business Growth
MGB222	Managing Organisations
MGB223	Entrepreneurship and Innovation
MGB335	Project Management

Fashion

Description: This co-major has been designed to offer a mix of theoretical and practical units. The theory units will develop your knowledge and understanding of the history, industry and consumption of fashion and will introduce you to the critical legal issues surrounding the production and distribution of fashion. The practical units provide you with a variety of options to develop fashion related skills focusing on textile design, portfolio development and fashion journalism.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KCB203	Consumer Cultures
KFB103	Introduction to Fashion
KFB106	Unspeakable Beauty: A History of Fashion and Style
KFB107	Drawing For Fashion
KFB205	Fashion and Style Journalism
KFB206	Fashion and Modernity
KFB207	Contemporary Fashion
KFB208	Fashion Portfolio
KFB209	Ragtrade: Wholesaling Fashion
KFB304	Fashion, Law and the Real World
KVB213	Graphic Investigation

Film, Television and Screen

Description: The aim of this co-major is to provide students with a range of understandings in the theory and practice of film, television and screen. This study area aims to enhance creative, technical and organizational abilities as well as building story telling and communication skills.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KPB101	Foundations of Film and Television Production
KPB102	Film History
KPB104	Film and Television Production Resource Management
KPB105	Narrative Production
KPB106	Australian Television
KPB107	Television's Greatest Hits
KPB108	Media Text Analysis
KPB202	Film and Television Business Skills: Entrepreneurship and Investment
KPB203	Australian Film
KPB205	Documentary Theory and Practice
KPB206	International Cinema
KPB303	Critical Thinking About Television

Game Design

INB180	Computer Games Studies
INB181	Games Production
INB280	Games Design
INB272	Interaction Design
INB104	Building IT Systems
INB281	Advanced Games Design
KIB101	Visual Communication
KIB102	Visual Interactions

Integrated Marketing Communication

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

AMB202	Integrated Marketing Communication
AMB208	Events Marketing
AMB220	Advertising Theory and Practice
AMB230	Digital Promotions
AMB240	Marketing Planning and Management
AMB260	Public Relations Theory and Practice
AMB261	Media Relations and Publicity
AMB331	Direct Marketing
AMB350	Sales and Customer Relationship Management
BSB126	Marketing

Interactive and Visual Design

KIB101	Visual Communication
KIB102	Visual Interactions
KIB103	Introduction to Web Design and Development
KIB104	Digital Media
KIB214	Design for Interactive Media
KIB216	Advanced Web Design
KIB230	Interface and Information Design
KIB315	Contemporary Issues in Digital Media

Journalism, Media and Communication

Description: This co-major offers you a range of options to develop an understanding of the parameters of the journalism and professional communication fields. You can choose a mix of units to suit your career aspirations. If you choose to focus more on the Journalism (KJB) units, the co-major will introduce you to a range of journalism writing styles and offers an insight into some specialist areas of reporting. If you choose to focus more on the Media and Communication (KCB) units, it has been designed to enable you to develop the skills and knowledge to prepare media material for organizations that wish to build, and maintain, a media profile.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KCB102	Media and Society: From Printing Press to Internet
	OR
KJB101	Digital Journalism
KJB120	Newswriting
KCB104	Media and Communications Industries
KJB121	Journalistic Inquiry
KCB103	Strategic Speech Communication
KJB224	Feature Writing
KJB239	Journalism Ethics and Issues
KFB205	Fashion and Style Journalism
	OR
KJB280	International Journalism
KCB301	Media Audiences
KCB302	Political Communication
KCB304	Managing Communication Resources
	OR
KJB337	Public Affairs Reporting

Literary Studies

Description: The aims of this co-major are to prepare students to graduate with adequate skills and knowledge in the area of literary and cultural studies; to provide a thorough grounding in a range of texts, both literary and popular, ranging from Shakespeare to nineteenth and twentieth century literature and culture; to provide graduates with enhanced skills in critical thinking, writing and analysis; to provide graduates with an understanding of the social and historical context of literary and popular written texts; to provide some understanding of the major approaches in literary theory.

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

KWB108	Introduction To Literary Studies
KWB109	Writing Australia
KWB206	Youth and Children's Writing
KWB207	Great Books: Creative Writing Classics
KWB208	Modern Times (Literature and Culture in the 20th Century)
KWB209	Shakespeare, Then and Now
KWB308	Wonderlands: Literature and Culture in the 19th Century
KWB309	Popular Fictions, Popular Culture

Marketing

Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.

AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research
AMB202	Integrated Marketing Communication
AMB240	Marketing Planning and Management
AMB335	E-Marketing Strategies
AMB340	Services Marketing
AMB341	Strategic Marketing
BSB126	Marketing

Mathematics

Description: This co-major aims to provide you with powerful tools for the analysis of today's complex world and give an insight into many real-world problems of significant importance.

Assumed Knowledge: Maths B (if you do not have this you should include MAB105 as one of your first units)

MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB314	Statistical Modelling 2

Online Environments

INB104	Building IT Systems
	Choose 3 of the following units (INB122 and INB210 cannot both be taken)
INB122	Organisational Databases
INB210	Databases
INB270	Programming
INB271	The Web
INB272	Interaction Design
	Choose 4 of the following INB 300-level units
INB313	Electronic Commerce Site Development
INB322	Information Systems Consulting
INB340	Database Design
INB345	Devices in the Wild
INB346	Web 2.0
INB370	Software Development
INB373	Web Application Development

Public Relations

	Assumed Knowledge: There is no specific prior knowledge required as a prerequisite to undertaking this co-major.
AMB201	Marketing and Audience Research
AMB202	Integrated Marketing Communication
AMB261	Media Relations and Publicity
AMB262	Public Relations Writing
AMB263	Public Relations Theory and Practice
AMB373	Corporate Communication
AMB374	Global Public Relations Cases
AMB379	Public Relations Campaigns
BSB126	Marketing

Transitions to New Professional Environments Units

A maximum of 48 credit points may be taken from the following units:

KKB341	Workplace Learning 1
KKB342	Workplace Learning 2
KKB343	Service Learning 1
KKB344	Service Learning 2
KKB345	Creative Industries Project 1
KKB346	Creative Industries Project 2

KKB347	Becoming A Researcher: Understandings, Skills and Practices
KKB348	Becoming A Researcher: Contexts, Protocols and Impact
KKB350	Creative Industries International Study Tour

Potential Careers:

Advertising Professional, Animator, Art Writer, Artist, Arts Administrator, Computer Game Programmer, Computer Games Developer, Creative Writer, Digital Composer, Fashion Professional, Film Composer, Film/Television Producer, Information Officer, Information Security Specialist, Internet Professional, Marketing Officer/Manager, Media Industry Specialist, Multimedia Designer, Music Agent/Manager, Music Publisher, Music Sampler, Music Technologist, Organisational Communication Specialist, Public Relations Officer/Consultant, Recording Engineer, Sound and Music Producer, Sound Designer, Technical Officer, Visual Artist, Web Designer.

Bachelor of Information Technology/Bachelor of Mathematics (IX57)

Year offered: 2009
Admissions: Yes
CRICOS code: 059226F
Course duration (full-time): 4 Years
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419552
Past rank cut-off: 77
Past OP cut-off: 12
OP Guarantee: Yes
Assumed knowledge: English (4,SA), Maths B (4,SA)
Total credit points: 384
Course coordinator: Mr Richard Thomas (IT23), Dr Gary Carter (MA54)
Campus: Gardens Point

Course Description

The double degree offers a foundation in mathematics and information technology in the first year. You will then select integrated strands combining units from the areas of applicable mathematics, computational mathematics, operations research, statistics, or financial mathematics with a combined major in Data Communications and Software Engineering.

This degree equips you to build and apply creative, innovative IT solutions across diverse industries. A hands-on, real world based curriculum gives you the opportunity to explore a wide range of areas within the two strands of this degree, and gain deep understanding within your chosen area speciality, such as networking, software engineering, data warehousing, business process modelling, enterprise systems, information management, web technologies, or digital societies. You will experience an innovative, hands-on approach to learning through projects where you develop IT systems. You will be able to gain entrepreneurial skills if you wish to learn how to develop an idea into a commercial opportunity. You learn to harness your creativity and people skills to maximise the impact of your technical know-how in the booming IT marketplace. It positions you for a challenging and rewarding career within the global economy. Full-time students are eligible for the Cooperative Education Program; paid industry work experience with credit towards your degree. Students are also offered many other work-integrated learning opportunities where you receive first-hand industry experience.

Career Outcomes

IT is now an integral part of all commercial, industrial and government activities. A graduate may find employment as a programmer, software engineer, systems programmer, computer scientist, systems analyst, security analyst, data communications specialist, information manager, electronic commerce developer, games developer, multimedia specialist, network administrator, database manager, web developer, mathematician, or statistician.

Professional Recognition

On graduation, you will be eligible for membership of the Mathematical Society of Australia (MSA), the Statistical Society of Australia (SSA) and, depending on unit selection, the Australian Society for Operations Research (ASOR). Graduates of the Bachelor of Information Technology meet the knowledge requirement for admission to the Australian Computer Society (ACS).

Study Areas

IX57 will not have nominated majors and minors and consequently there will not be a Study Area A shown on a graduateâs parchment. Instead, IX57 will have specialisations. The specialisation areas that will be available for students will include:
â¢ Business Process Management
â¢ Data Warehousing
â¢ Digital Societies
â¢ Enterprise Systems
â¢ Information Management
â¢ Network Systems
â¢ Software Engineering
â¢ Web Technologies

Entry Requirements

Year 12 or equivalent
Prerequisites: Nil
Primary Fields: C
Secondary Fields: B

International Students

English language requirements
In addition to the above academic entry requirements, international students must meet the Universityâs English language requirements of IELTS of 6.5 (with no lower than 6.0 for any one band).

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.

Contact Details

Information Technology Coordinator
Mr Richard Thomas
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Email: enquiry.scitech@qut.edu.au

Mathematics Coordinator
Dr Gary Carter
Phone: +61 7 3138 5090
Email: g.carter@qut.edu.au

Cooperative Education

The School of ITâs 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 youâre 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.

Course Structure for Students with Four Semesters of Senior Mathematics B and Senior Mathematics C

Year 1, Semester 1	
INB101	Impact of IT
INB102	Emerging Technology
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C

Year 1, Semester 2	
INB103	Industry Insights
INB104	Building IT Systems
MAB210	Statistical Modelling 1
MAB220	Computational Mathematics 1

Year 2, Semester 1	
	IT Breadth Unit Option
	IT Breadth Unit Option
MAB101	Statistical Data Analysis 1
MAB312	Linear Algebra

Year 2, Semester 2	
	IT Breadth Unit Option
	IT Breadth Unit Option
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 3, Semester 1	
INB201	Scalable Systems Development
	IT Specialisation Unit Option
MAB311	Advanced Calculus

	Level 2 or 3 Maths Unit

Year 3, Semester 2	
INB300	Professional Practice in IT
	IT Specialisation Unit Option
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 4, Semester 1	
INB301	The Business of IT
	IT Specialisation Unit Option
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 4, Semester 2	
INB302	Capstone Project
	IT Specialisation Unit Option
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Course Structure for Students with Four Semesters of Senior Mathematics B Only

Year 1, Semester 1	
INB101	Impact of IT
INB102	Emerging Technology
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1

Year 1, Semester 2	
INB103	Industry Insights
INB104	Building IT Systems
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C

Year 2, Semester 1	
	IT Breadth Unit Option
	IT Breadth Unit Option
MAB220	Computational Mathematics 1
MAB312	Linear Algebra

Year 2, Semester 2	
	IT Breadth Unit Option
	IT Breadth Unit Option
MAB210	Statistical Modelling 1
	Level 2 or 3 Maths Unit

Year 3, Semester 1	
INB201	Scalable Systems Development
	IT Specialist Unit Option
MAB311	Advanced Calculus
	Level 2 or 3 Maths Unit

Year 3, Semester 2

INB300	Professional Practice in IT
	IT Specialist Unit Option
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 4, Semester 1

INB301	The Business of IT
	IT Specialist Unit Option
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 4, Semester 2

INB302	Capstone Project
	IT Specialist Unit Option
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Mathematics Units

Level 2 Units

MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2
MAB315	Operations Research 2
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB420	Computational Mathematics 2
MAB422	Mathematical Modelling
MAB461	Discrete Mathematics
MAB480	Introduction to Scientific Computation
MAB481	Visualisation and Data Analysis

Note: MAB311 Advanced Calculus and MAB312 Linear Algebra are mandatory units.

Level 3 Units - at least 4 units must be selected

MAB521	Applied Mathematics 3
MAB522	Computational Mathematics 3
MAB524	Statistical Inference
MAB525	Operations Research 3A
MAB533	Statistical Techniques
MAB536	Time Series Analysis
MAB613	Partial Differential Equations
MAB623	Financial Mathematics
MAB624	Applied Statistics 3
MAB625	Operations Research 3B
MAB640	Industry Project
MAB672	Advanced Mathematical Modelling
MAB681	Advanced Visualisation and Data Analysis

Note: MAB523 Introduction to Quality Management and MAB621 Discrete Mathematics do not contribute to the mandatory 48 credit points minimum from Level 3 Mathematics units.

IT Breadth Option Unit List

IT Breadth Option Units

You must complete four (4) units from the following list. You should not commence these units until you have completed INB101, INB102, INB103 and INB104.

INB120	Corporate Systems
INB210	Databases
INB220	Business Analysis
INB250	Systems Architecture
INB251	Networks
INB255	Security
INB270	Programming
INB271	The Web
INB272	Interaction Design

IT Specialisation Option Unit List

IT Specialist Option Units

You must complete four (4) 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. The units are grouped in areas to assist you in focusing your studies.

1.	Enterprise Systems:
INB123	Project Management Practice
INB221	Technology Management
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
2.	Web Technologies:
INB313	Electronic Commerce Site Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
3.	Business Process Management:
INB320	Business Process Modelling
INB321	Business Process Management
INB322	Information Systems Consulting
INB323	Smart Services
4.	Information Management:
INB330	Information Management
INB331	Management Issues for Info Professionals
INB332	Information Retrieval
INB333	Information Programs

INB334	Information Issues and Values
INB335	Information Resources
5.	Data Warehousing:
INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining
INB343	Advanced Data Mining and Data Warehousing
6.	Network Systems:
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB353	Wireless and Mobile Networks
7.	Software Engineering:
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles
INB374	Enterprise Software Architecture
8.	Ungrouped:
INB204	Special Topic 1
INB205	Special Topic 2
INB304	Special Topic 3
INB305	Special Topic 4
INB306	Project 1
INB307	Project 2
INB308	Project 3
INB355	Cryptology and Protocols
INB365	Systems Programming
INB860	Computational Intelligence for Control and Embedded Systems
9.	Digital Environments:
INB345	Mobile Devices
INB346	Enterprise 2.0
INB347	Web 2.0 Applications
INB334	Information Issues and Values

Potential Careers:

Actuary, Computer Game Programmer, Data Communications Specialist, Database Manager, Market Research Manager, Mathematician, Network Administrator, Network Manager, Programmer, Quantitative Analyst, Software Engineer, Statistician, Systems Analyst.

Bachelor of Business (Study Area A)/ Bachelor of Information Technology (IX58)

Year offered: 2009
Admissions: Yes
CRICOS code: 059595C
Course duration (full-time): 4 Years
Domestic fees (indicative): 2009: CSP $4,022 (indicative) per semester
International Fees (per semester): 2009: $10,000 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419202
Past rank cut-off: 77
Past OP cut-off: 12
OP Guarantee: Yes
Assumed knowledge: English (4,SA), Maths A, B or C (4,SA)
Total credit points: 384
Course coordinator: Mr Richard Thomas (IT23), Dr Erica French (Business)
Discipline coordinator: Ms Ros Kent (Accountancy); Ms Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Robert Bianchi (Finance); Dr Robert Thompson (Human Resource Management); Mr Michael Cox (International Business); Dr Kavoos Mohannak (Management); Mr Bill Proud (Marketing); and Ms Amisha Mehta (Public Relations)
Campus: Gardens Point

Study Areas

IX58 will not have nominated majors and minors and consequently there will not be a Study Area A shown on a graduateâs parchment. Instead, IX58 will have specialisations. The specialisation areas that will be available for students will include:
â¢ Business Process Management
â¢ Data Warehousing
â¢ Digital Societies
â¢ Enterprise Systems
â¢ Information Management
â¢ Network Systems
â¢ Software Engineering
â¢ Web Technologies

Course Description

This degree equips you to build and apply creative, innovative IT solutions across diverse industries. A hands-on, real world based curriculum gives you the opportunity to explore a wide range of areas within the two strands of this degree, and gain deep understanding within your chosen area speciality, such as networking, software engineering, data warehousing, business process modelling, enterprise systems, information management, web technologies, or digital societies. You will experience an innovative, hands-on approach to learning through projects where you develop IT systems. You will be able to gain entrepreneurial skills if you wish to learn how to develop an idea into a commercial opportunity. You learn to harness your creativity and people skills to maximise the impact of your technical know-how in the booming IT marketplace. It positions you for a challenging and rewarding career within the global economy. Full-time students are eligible for the Cooperative Education Program; paid industry work experience with credit towards your degree. Students are also offered many other work-integrated learning opportunities where you receive first-hand industry experience.

Entry Requirements

Year 12 or equivalent
Prerequisites: Nil
Assumed Knowledge: English (4,SA), Maths A, B or C (4,SA)
Primary Fields: B or C
Secondary Fields: B or C
OP Guarantee: Yes

International Students

English language requirements
In addition to the above academic entry requirements, international students must meet the Universityâs English language requirements of IELTS of 6.5 (with no lower than 6.0 for any one band).

Pathways to Futher Studies

In 2001, an accelerated Honours program was introduced to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year. The program allowed selected high achieving students the opportunity to undertake one postgraduate unit in the final semester of their a BIT degree (or double degree) which would be counted both for completion of the degree and towards the Honours program. The program also provided students with the opportunity to commence their Honours studies over the Summer Semester.

An alternative to the Honours program is the Master of Information Technology (Research). Students who complete a BIT degree (or double degree) with a grade point average equal to, or greater than 5 (7 point scale) and who have decided against enrolling in an Honours program, could undertake this course. In addition, students may wish to enrol in the 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 School of ITâs 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 youâre 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.

IT Breadth Option Unit List

IT Breadth Option Units

You must complete four (4) units from the following list. You should not commence these units until you have completed INB101, INB102, INB103 and INB104.

INB120	Corporate Systems
INB210	Databases
INB220	Business Analysis
INB250	Systems Architecture
INB251	Networks
INB255	Security
INB270	Programming
INB271	The Web
INB272	Interaction Design

IT Specialisation Option Unit List

IT Specialist Option Units

You must complete four (4) 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. The units are grouped in areas to assist you in focusing your studies.

1.		Enterprise Systems:
INB123	Project Management Practice
INB221	Technology Management
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
2.		Web Technologies:
INB313	Electronic Commerce Site Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
3.		Business Process Management:
INB320	Business Process Modelling
INB321	Business Process Management
INB322	Information Systems Consulting
INB323	Smart Services
4.		Information Management:
INB330	Information Management
INB331	Management Issues for Info Professionals
INB332	Information Retrieval
INB333	Information Programs
INB334	Information Issues and Values
INB335	Information Resources
5.		Data Warehousing:

INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining
INB343	Advanced Data Mining and Data Warehousing
6.		Network Systems:
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB353	Wireless and Mobile Networks
7.		Software Engineering:
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles
INB374	Enterprise Software Architecture
8.		Ungrouped:
INB204	Special Topic 1
INB205	Special Topic 2
INB304	Special Topic 3
INB305	Special Topic 4
INB306	Project 1
INB307	Project 2
INB308	Project 3
INB355	Cryptology and Protocols
INB365	Systems Programming
INB860	Computational Intelligence for Control and Embedded Systems
9.		Digital Environments:
INB345	Mobile Devices
INB346	Enterprise 2.0
INB347	Web 2.0 Applications
INB334	Information Issues and Values

IX58 - Business component (Accountancy) - course structure

Year 1, Semester 1

BSB110	Accounting
BSB115	Management
	Information Technology unit
	Information Technology unit

Year 1, Semester 2

BSB123	Data Analysis
BSB126	Marketing
	Information Technology unit
	Information Technology unit

Year 2, Semester 1

BSB111	Business Law and Ethics
BSB113	Economics

Information Technology unit
Information Technology unit

Year 2, Semester 2

AYB200	Financial Accounting
AYB225	Management Accounting
	Information Technology unit
	Information Technology unit

Year 3, Semester 1

EFB210	Finance 1
AYB221	Computerised Accounting Systems
	Information Technology unit
	Information Technology unit

Year 3, Semester 2

AYB219	Taxation Law
AYB340	Company Accounting
	Information Technology unit
	Information Technology unit

Year 4, Semester 1

AYB230	Corporations Law
AYB321	Strategic Management Accounting
	Information Technology unit
	Information Technology unit

Year 4, Semester 2

AYB301	Audit and Assurance
AYB311	Financial Accounting Issues
	Information Technology unit
	Information Technology unit

IX58 - Business component (Advertising) - course structure

Year 1, Semester 1

BSB126	Marketing
BSB113	Economics
	Information Technology unit
	Information Technology unit

Year 1, Semester 2

BSB110	Accounting
BSB115	Management
	Information Technology unit
	Information Technology unit

Year 2, Semester 1

BSB124	Working in Business
BSB119	Global Business
	Information Technology unit

Information Technology unit

Year 2, Semester 2

AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research
	Information Technology unit
	Information Technology unit

Year 3, Semester 1

AMB220	Advertising Theory and Practice
BSB111	Business Law and Ethics
	Information Technology unit
	Information Technology unit

Year 3, Semester 2

AMB318	Advertising Copywriting
AMB319	Media Planning
	Information Technology unit
	Information Technology unit

Year 4, Semester 1

AMB320	Advertising Management
AMB330	Advertising Planning Portfolio
	Information Technology unit
	Information Technology unit

Year 4, Semester 2

AMB339	Advertising Campaigns
BSB123	Data Analysis
	Information Technology unit
	Information Technology unit

IX58 - Business component (Economics) - course structure

Year 1, Semester 1

BSB113	Economics
BSB115	Management
	Information Technology unit
	Information Technology unit

Year 1, Semester 2

BSB124	Working in Business
BSB123	Data Analysis
	Information Technology unit
	Information Technology unit

Year 2, Semester 1

BSB110	Accounting
BSB111	Business Law and Ethics
	Information Technology unit
	Information Technology unit

Year 2, Semester 2	
EFB222	Quantitative Methods For Economics and Finance
EFB223	Economics 2
	Information Technology unit
	Information Technology unit

Year 3, Semester 1	
EFB330	Intermediate Macroeconomics
EFB331	Intermediate Microeconomics
	Information Technology unit
	Information Technology unit

Year 3, Semester 2	
	Choice units or remaining Faculty Core Units
	Choice units or remaining Faculty Core Units
	null
	null

Year 4, Semester 1	
	Choice units or remaining Faculty Core Units
	Choice units or remaining Faculty Core Units
	null
	null

Year 4, Semester 2	
EFB338	Contemporary Application of Economic Theory
	Choice units or remaining Faculty Core Units
	Information Technology unit
	Information Technology unit

Please note:	
	Please note: BSB119 and BSB126 are the remaining Faculty Core Units to be completed.

IX58 - Business component (Finance) - course structure

Year 1, Semester 1	
BSB113	Economics
BSB115	Management
	Information Technology unit
	Information Technology unit

Year 1, Semester 2	
BSB124	Working in Business
BSB126	Marketing
	Information Technology unit
	Information Technology unit

Year 2, Semester 1	
BSB110	Accounting
BSB111	Business Law and Ethics

	Information Technology unit
	Information Technology unit

Year 2, Semester 2	
BSB123	Data Analysis
BSB119	Global Business
	Information Technology unit
	Information Technology unit

Year 3, Semester 1	
EFB222	Quantitative Methods For Economics and Finance
EFB210	Finance 1
	Information Technology unit
	Information Technology unit

Year 3, Semester 2	
EFB201	Financial Markets
EFB307	Finance 2
	Information Technology unit
	Information Technology unit

Year 4, Semester 1	
EFB223	Economics 2
EFB335	Investments
	Information Technology unit
	Information Technology unit

Year 4, Semester 2	
EFB312	International Finance
EFB340	Finance Capstone
	Information Technology unit
	Information Technology unit

IX58 - Business component (Human Resource Management) - course structure

Year 1, Semester 1	
BSB113	Economics
BSB115	Management
	Information Technology unit
	Information Technology uniti

Year 1, Semester 2	
BSB124	Working in Business
BSB126	Marketing
	Information Technology unit
	Information Technology unit

Year 2, Semester 1	
BSB110	Accounting
BSB111	Business Law and Ethics

	Information Technology unit
	Information Technology unit

Year 2, Semester 2

BSB123	Data Analysis
BSB119	Global Business
	Information Technology unit
	Information Technology unit

Year 3, Semester 1

MGB207	Human Resource Issues and Strategy
MGB220	Business Research Methods
	Information Technology unit
	Information Technology unit

Year 3, Semester 2

MGB200	Leading Organisations
MGB201	Contemporary Employment Relations
	Information Technology unit
	Information Technology unit

Year 4, Semester 1

MGB331	Learning and Development in Organisations
MGB339	Performance and Reward
	Information Technology unit
	Information Technology unit

Year 4, Semester 2

MGB320	Recruitment and Selection
MGB370	Personal and Professional Development
	Information Technology unit
	Information Technology unit

IX58 - Business component (International Business) - course structure

Year 1, Semester 1

BSB126	Marketing
BSB119	Global Business
	Information Technology unit
	Information Technology unit

Year 1, Semester 2

BSB110	Accounting
BSB115	Management
	Information Technology unit
	Information Technology unit

Year 2, Semester 1

BSB124	Working in Business
BSB123	Data Analysis
	Information Technology unit

	Information Technology unit

Year 2, Semester 2

BSB111	Business Law and Ethics
BSB113	Economics
	Information Technology unit
	Information Technology unit

Year 3, Semester 1

MGB225	Intercultural Communication and Negotiation Skills
AYB227	International Accounting
	Information Technology unit
	Information Technology unit

Year 3, Semester 2

AMB210	Importing and Exporting
EFB240	Finance for International Business
	Information Technology unit
	Information Technology unit

Year 4, Semester 1

AMB303	International Logistics
AMB336	International Marketing
	Information Technology unit
	Information Technology unit

Year 4, Semester 2

MGB340	International Business in the Asia-pacific
AMB369	International Business Strategy
	Information Technology unit
	Information Technology unit

IX58 - Business component (Management) - course structure

Year 1, Semester 1

BSB113	Economics
BSB115	Management
	Information Technology unit
	Information Technology unit

Year 1, Semester 2

BSB124	Working in Business
BSB126	Marketing
	Information Technology unit
	Information Technology unit

Year 2, Semester 1

BSB110	Accounting
BSB111	Business Law and Ethics
	Information Technology unit

Information Technology unit

Year 2, Semester 2		
BSB119	Global Business	
BSB123	Data Analysis	
	Information Technology unit	
	Information Technology unit	

Year 3, Semester 1		
MGB210	Managing Operations	
MGB223	Entrepreneurship and Innovation	
	Information Technology unit	
	Information Technology unit	

Year 3, Semester 2		
MGB200	Leading Organisations	
MGB225	Intercultural Communication and Negotiation Skills	
	Information Technology unit	
	Information Technology unit	

Year 4, Semester 1		
MGB309	Strategic Management	
MGB324	Managing Business Growth	
	Information Technology unit	
	Information Technology unit	

Year 4, Semester 2		
MGB310	Sustainability in A Changing Environment	
MGB335	Project Management	
	Information Technology unit	
	Information Technology unit	

IX58 - Business component (Marketing) - course structure

Year 1, Semester 1		
BSB126	Marketing	
BSB113	Economics	
	Information Technology unit	
	Information Technology unit	

Year 1, Semester 2		
BSB111	Business Law and Ethics	
BSB115	Management	
	Information Technology unit	
	Information Technology unit	

Year 2, Semester 1		
BSB119	Global Business	
BSB124	Working in Business	
	Information Technology unit	

Information Technology unit

Year 2, Semester 2		
BSB110	Accounting	
BSB123	Data Analysis	
	Information Technology unit	
	Information Technology unit	

Year 3, Semester 1		
AMB200	Consumer Behaviour	
AMB201	Marketing and Audience Research	
	Information Technology unit	
	Information Technology unit	

Year 3, Semester 2		
AMB202	Integrated Marketing Communication	
AMB240	Marketing Planning and Management	
	Information Technology unit	
	Information Technology unit	

Year 4, Semester 1		
AMB335	E-marketing Strategies	
AMB340	Services Marketing	
	Information Technology unit	
	Information Technology unit	

Year 4, Semester 2		
AMB336	International Marketing	
AMB359	Strategic Marketing	
	Information Technology unit	
	Information Technology unit	

IX58 - Business component (Public Relations) - course structure

Year 1, Semester 1		
BSB119	Global Business	
BSB126	Marketing	
	Information Technology unit	
	Information Technology unit	

Year 1, Semester 2		
BSB110	Accounting	
BSB115	Management	
	Information Technology unit	
	Information Technology unit	

Year 2, Semester 1		
BSB124	Working in Business	
BSB113	Economics	
	Information Technology unit	
	Information Technology unit	

Year 2, Semester 2	
AMB263	Introduction To Public Relations
AMB264	Public Relations Techniques
	Information Technology unit
	Information Technology unit

Year 3, Semester 1	
AMB201	Marketing and Audience Research
BSB111	Business Law and Ethics
	Information Technology unit
	Information Technology unit

Year 3, Semester 2	
AMB372	Public Relations Planning
AMB373	Corporate Communication
	Information Technology unit
	Information Technology unit

Year 4, Semester 1	
AMB374	Global Public Relations Cases
AMB375	Public Relations Management
	Information Technology unit
	Information Technology unit

Year 4, Semester 2	
AMB379	Public Relations Campaigns
BSB123	Data Analysis
	Information Technology unit
	Information Technology unit

Potential Careers:

Academic, Account Executive, Accountant, Administrator, Advertising Professional, Banker, Banking and Finance Professional, Economist, Financial Project Manager, Financial Risk Manager, Human Resource Developer, Human Resource Manager, International Business Specialist, Manager, Market Research Manager, Marketing Officer/Manager, Public Relations Officer/Consultant.

Bachelor of Corporate Systems Management/Bachelor of Justice (IX61)

Year offered: 2009
Admissions: Yes
CRICOS code: 063030F
Domestic fees (indicative): 2009: CSP $3,232,(indicative) per semester
International Fees (per semester): 2009: $9,750 (indicative) per semester *(subject to annual review)*
International Entry: February
QTAC code: 419652
Past rank cut-off: 75
Past OP cut-off: 13
OP Guarantee: Yes
Course coordinator: Dr Taizan Chan
Discipline coordinator: Justice Coordinator - Assoc Prof Belinda Carpenter
Campus: Gardens Point

Course overview

In this double degree students complete the requirements for two separate degrees in four years. The course consists of units in both corporate systems management and justice. In the corporate systems management component students are taught the interrelationship between information, technology, business and people. This component develops the knowledge and skills needed to understand and communicate business needs, select the right systems and integrate these systems to improve business performance. The justice component comprises of foundation units, after which students then focus on a primary major discipline in either Criminology or Policing. Full time students can take part in the Cooperative Education Program, offering one year paid industry placement and credit towards their degree (subject to satisfying eligibility requirements). Alternatively, Professional Placement is available to high achieving students, with a GPA of 5 or more, in their last semester of the justice component of the course.

Justice Majors: Criminology; Policing

Cooperative Education Program

Cooperative Education Program
The School of ITâs 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 youâre learning in your degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNiTAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the Cooperative Education Program.

Futher Information

Please contact the Course Co-ordinator Dr Taizan Chan (07)3138 2782 or enquiry.scitech@qut.edu.au

Recommended course progression

Year 1, Semester 1

INB120	Corporate Systems
INB103	Industry Insights
JSB171	Justice and Society
JSB172	Introduction To Crime Research

Year 1, Semester 2

INB123	Project Management Practice
BSB115	Management
JSB173	Understanding the Criminal Justice System
JSB174	Forensic Psychology and the Law

Year 2, Semester 1

INB121	Socio-technical Systems
INB122	Organisational Databases
JSB175	Social Ethics and the Justice System
JSB176	Criminal Law in Context

Year 2, Semester 2

INB124	Information Systems Development
INB830	Web Site for Electronic Commerce
JSB177	Crimes of Violence
LWB141	Legal Institutions and Method

Year 3, Semester 1

INB220	Business Analysis
INB221	Technology Management
	Major unit (Choose from Primary Major of Criminology or Policing)
	Major unit (Choose from Primary Major of Criminology or Policing)

Year 3, Semester 2

EFB	Financial Information Systems
INB320	Business Process Modelling
	Major unit (Choose from Primary Major of Criminology or Policing)
	Major unit (Choose from Primary Major of Criminology or Policing)

Year 4, Semester 1

INB312	Enterprise Systems Applications
INB322	Information Systems Consulting
	Major unit (Choose from Primary Major of Criminology or Policing)
	Major unit (Choose from Primary Major of Criminology or Policing)

Year 4, Semester 2

BSB126	Marketing
INB307	Project 2

Justice Elective Unit

Justice Elective Unit

Potential Careers:

Administrator, Crown Law Officer, Customs Officer, Data Communications Specialist, Database Manager, Government Officer, Information Officer, Information Security Specialist, Investigator, Police Officer (Australian Federal), Police Officer (State), Risk Manager, Systems Manager.

Bachelor of Business/Bachelor of Corporate Systems Management (IX62)

Year offered: 2009
Admissions: Yes
CRICOS code: 063022F
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,884 (indicative) per semester
International Fees (per semester): 2009: $10,000 (indicative) per semester *(subject to annual review)*
International Entry: February
QTAC code: 419642
Past rank cut-off: 77
Past OP cut-off: 12
Assumed knowledge: English (4, SA) and Math A, B or C (4, SA)
Course coordinator: Dr Taizan Chan; Dr Erica French (Business)
Discipline coordinator: Ms Ros Kent (Accountancy); Ms Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Robert Bianchi (Finance); Dr Robert Thompson (Human Resource Management); Mr Michael Cox (International Business); Dr Kavoos Mohannak (Management); Mr Bill Proud (Marketing); and Ms Amisha Mehta (Public Relations)
Campus: Gardens Point

Course overview

In this double degree students complete the requirements for two separate degrees in four years. The course consists of units in both corporate systems management and business. In the Business component students complete a set of core units to provide a broad-based introduction to business principles and a major from the list below. In the corporate systems management component students are taught the interrelationship between information, technology, business and people. This component develops the knowledge and skills needed to understand and communicate business needs, select the right systems and integrate these systems to improve business performance. Full time students can take part in the Cooperative Education Program, offering one year paid industry placement and credit towards their degree (subject to satisfying eligibility requirements).

Majors: Business: accountancy; advertising; economics; finance; human resource management; international business; management; marketing; and public relations.

Cooperative Education Program

The School of ITâs 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 youâre learning in your degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNiTAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the Cooperative Education Program.

Futher Information

Please contact the Course Co-ordinator Dr Taizan Chan (07)3138 2782 or enquiry.scitech@qut.edu.au

Professional Recognition

The Bachelor of Business degree may, subject to choice of major, allow graduates to satisfy the academic requirements for membership as follows:
*All majors: Chartered Secretaries Australia (CSA) - enrolment in the Graduate Diploma in Applied Corporate Governance.
*Accountancy: CPA Australia (associate membership & enrolment in the CPA Program), Institute of Chartered Accountants in Australia (ICAA)(enrolment in the CA Program).
*Advertising - Advertising Federation of Australia, Australian Association of National Advertisers, Australian Direct Marketing Association;
*Economics: Economic Society of Australia (Queensland Division).
*Finance: Financial Services Institute of Australasia (FINSIA).
*Human Resource Management - Australian Human Resources Institute, Australian Institute of Training and Development, Australian Institute of Management;
*International Business - Australian Institute of Export, the Logistics Association of Australia and the Chartered Institute of Purchasing;
*Management - Australian Institute of Management;
*Marketing: Australian Marketing Institute, Market Research Society of Australia, Australian Institute of Management, Australian Institute of Export (Qld) Ltd, American Marketing Association.
*Public Relations - Public Relations Institute of Australia.

Accountancy Major

Year 1 Semester 1	
BSB110	Accounting
BSB115	Management

Year 1 Semester 2	
BSB111	Business Law and Ethics
BSB123	Data Analysis
BSB126	Marketing

Year 2 Semester 1	
BSB113	Economics
BSB124	Working in Business

Year 2 Semester 2	
AYB200	Financial Accounting
AYB225	Management Accounting

Year 3 Semester 1	
EFB210	Finance 1
AYB221	Computerised Accounting Systems

Year 3 Semester 2

AYB219	Taxation Law
AYB340	Company Accounting
MGB223	Entrepreneurship and Innovation

Year 4 Semester 1

AYB230	Corporations Law
AYB321	Strategic Management Accounting

Year 4 Semester 2

AYB301	Audit and Assurance
AYB311	Financial Accounting Issues

Advertising Major

Year 1 Semester 1

BSB113	Economics
BSB126	Marketing

Year 1 Semester 2

BSB110	Accounting
BSB115	Management
BSB119	Global Business

Year 2 Semester 1

BSB111	Business Law and Ethics
BSB124	Working in Business

Year 2 Semester 2

AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research

Year 3 Semester 1

AMB220	Advertising Theory and Practice
	Choose one of:
AMB202	Integrated Marketing Communication
AMB230	Digital Promotions
AMB331	Direct Marketing

Year 3 Semester 2

AMB318	Advertising Copywriting
AMB319	Media Planning
BSB123	Data Analysis

Year 4 Semester 1

AMB320	Advertising Management
AMB330	Advertising Planning Portfolio

Year 4 Semester 2

AMB339	Advertising Campaigns
BSB123	Data Analysis

Economics Major

Year 1 Semester 1

BSB113	Economics
BSB115	Management

Year 1 Semester 2

BSB110	Accounting
BSB123	Data Analysis
BSB124	Working in Business

Year 2 Semester 1

BSB111	Business Law and Ethics
BSB119	Global Business

Year 2 Semester 2

EFB222	Quantitative Methods For Economics and Finance
EFB223	Economics 2

Year 3 Semester 1

EFB330	Intermediate Macroeconomics
EFB331	Intermediate Microeconomics

Year 3 Semester 2

BSB126	Marketing
	Choice units or remaining Faculty Core Units
	Choice units or remaining Faculty Core Units

Year 4 Semester 1

	Choice units or remaining Faculty Core Units
	Choice units or remaining Faculty Core Units

Year 4 Semester 2

EFB338	Contemporary Application of Economic Theory
MGB223	Entrepreneurship and Innovation

Choice Units

	Choose any three of the following:
EFB332	Applied Behavioural Economics
EFB333	Introductory Econometrics
EFB334	Environmental Economics and Policy
EFB336	International Economics
EFB337	Game Theory and Applications

Important Information:

Please note: BSB126 are the remaining Faculty Core Unit to be completed. Please check for unit availability for Choice units.

Finance Major

Year 1 Semester 1

BSB113	Economics
BSB115	Management

Year 1 Semester 2	
BSB119	Global Business
BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1	
BSB110	Accounting
BSB111	Business Law and Ethics

Year 2 Semester 2	
BSB123	Data Analysis
MGB223	Entrepreneurship and Innovation

Year 3 Semester 1	
EFB222	Quantitative Methods For Economics and Finance
EFB210	Finance 1

Year 3 Semester 2	
EFB201	Financial Markets
EFB223	Economics 2
EFB307	Finance 2

Year 4 Semester 1	
EFB335	Investments
EFB333	Introductory Econometrics

Year 4 Semester 2	
EFB312	International Finance
EFB340	Finance Capstone

Human Resource Management

Year 1 Semester 1	
BSB113	Economics
BSB115	Management

Year 1 Semester 2	
BSB119	Global Business
BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1	
BSB110	Accounting
BSB111	Business Law and Ethics

Year 2 Semester 2	
BSB123	Data Analysis
MGB200	Leading Organisations

Year 3 Semester 1	
MGB207	Human Resource Issues and Strategy
MGB220	Business Research Methods

Year 3 Semester 2	
MGB201	Contemporary Employment Relations
MGB223	Entrepreneurship and Innovation
MGB314	Organisational Consulting and Change

Year 4 Semester 1	
MGB331	Learning and Development in Organisations
MGB339	Performance and Reward

Year 4 Semester 2	
MGB320	Recruitment and Selection
MGB370	Personal and Professional Development

International Business Major

Year 1 Semester 1	
BSB119	Global Business
BSB126	Marketing

Year 1 Semester 2	
BSB110	Accounting
BSB115	Management
BSB123	Data Analysis

Year 2 Semester 1	
BSB111	Business Law and Ethics
BSB124	Working in Business

Year 2 Semester 2	
BSB113	Economics
MGB225	Intercultural Communication and Negotiation Skills

Year 3 Semester 1	
AMB204	Purchasing and Procurement
AYB227	International Accounting

Year 3 Semester 2	
AMB210	Importing and Exporting
MGB223	Entrepreneurship and Innovation
EFB240	Finance for International Business

Year 4 Semester 1	
AMB303	International Logistics
AMB336	International Marketing

Year 4 Semester 2	
MGB340	International Business in the Asia-pacific
AMB369	International Business Strategy

Management Major

Year 1 Semester 1	
BSB113	Economics

BSB115	Management

BSB111	Business Law and Ethics
BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1

BSB110	Accounting
BSB123	Data Analysis

Year 2 Semester 2

BSB119	Global Business
MGB200	Leading Organisations

Year 3 Semester 1

MGB210	Managing Operations
MGB223	Entrepreneurship and Innovation

Year 3 Semester 2

MGB201	Contemporary Employment Relations
MGB225	Intercultural Communication and Negotiation Skills

Marketing Major

Year 1 Semester 1

BSB113	Economics
BSB126	Marketing

Year 1 Semester 2

BSB111	Business Law and Ethics
BSB115	Management
BSB119	Global Business

Year 2 Semester 1

BSB110	Accounting
BSB124	Working in Business

Year 2 Semester 2

BSB123	Data Analysis
MGB223	Entrepreneurship and Innovation

Year 3 Semester 1

AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research

Year 3 Semester 2

AMB202	Integrated Marketing Communication
AMB240	Marketing Planning and Management
AMB201	Marketing and Audience Research

Year 4 Semester 1

AMB335	E-marketing Strategies

AMB340	Services Marketing

Year 4 Semester 2

AMB336	International Marketing
AMB359	Strategic Marketing

Public Relations Major

Year 1 Semester 1

BSB119	Global Business
BSB126	Marketing

Year 1 Semester 2

BSB110	Accounting
BSB113	Economics
BSB115	Management

Year 2 Semester 1

BSB111	Business Law and Ethics
BSB124	Working in Business

Year 2 Semester 2

AMB263	Introduction To Public Relations
AMB264	Public Relations Techniques

Year 3 Semester 1

AMB201	Marketing and Audience Research
MGB223	Entrepreneurship and Innovation

Year 3 Semester 2

BSB123	Data Analysis
AMB372	Public Relations Planning
AMB373	Corporate Communication

Year 4 Semester 1

AMB374	Global Public Relations Cases
	Choose one of:
AMB202	Integrated Marketing Communication
AMB208	Events Marketing
AMB310	Internship

Year 4 Semester 2

AMB375	Public Relations Management
AMB379	Public Relations Campaigns

Potential Careers:

Account Executive, Accountant, Actuary, Administrator, Advertising Professional, Banker, Banking and Finance Professional, Business Analyst, Certified Practicing Accountant, Corporate Secretary, Economist, Financial Advisor/Analyst, Financial Project Manager, Funds Manager, Government Officer, Human Resource Manager, International Business Specialist, Manager, Marketing Officer/Manager, Public Relations Officer/Consultant.

Bachelor of Business/Bachelor of Games and Interactive Entertainment (IX63)

Year offered: 2009
Admissions: Yes
CRICOS code: 063024D
Course duration (full-time): 4 years
Domestic fees (indicative): 2009:CSP $4,022 (indicative) per semester
International Fees (per semester): 2009: $10,000 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419692
Past rank cut-off: 77
Past OP cut-off: 12
Assumed knowledge: English (4, SA) and Math A, B or C (4, SA)
Course coordinator: ASPRO Ruth Christie (IT); Dr Erica French (Business)
Discipline coordinator: Ms Ros Kent (Accountancy); Ms Gayle Kerr (Advertising); Dr Tommy Tang (Economics); Dr Robert Bianchi (Finance); Dr Robert Thompson (Human Resource Management); Mr Michael Cox (International Business); Dr Kavoos Mohannak (Management); Mr Bill Proud (Marketing); and Ms Amisha Mehta (Public Relations)
Campus: Gardens Point

Course overview

In this double degree students complete the requirements for two separate degrees in four years. The course consists of units in both business and games and interactive entertainment. In the Business component students complete a set of core units to provide a broad-based introduction to business principles and a major from the list below. In the games and interactive entertainment component students complete core units in introductory design, games studies, professional skills and basic programming and then choose a major from the list below. In final year, students participate in a major group project to produce a significant piece of work using PC, mobile devices, consoles or virtual reality. Full time students can take part in the Cooperative Education Program, offering one year paid industry placement and credit towards their degree (subject to satisfying eligibility requirements).

Majors: Business: Business: accountancy; advertising; economics; finance; human resource management; international business management; marketing; and public relations. Games and Interactive Entertainment: Animation and computational arts; digital media; game design; and software technologies.

Cooperative Education Program

The School of IT's Cooperative Education Program gives you the opportunity of 10-12 months paid industry placement during your course where you can integrate real experience with what you're learning in your degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNiTAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the Cooperative Education Program.

Career Outcomes

Business graduates work in diverse roles in the private and public sectors in areas such as accountancy, advertising, banking and finance, economics, human resource management, international business, management, marketing and public relations.

Professional Recognition

The Bachelor of Business degree may, subject to choice of major, allow graduates to satisfy the academic requirements for membership as follows:
*All majors: Chartered Secretaries Australia (CSA) - enrolment in the Graduate Diploma in Applied Corporate Governance;
*Accountancy: CPA Australia (associate membership & enrolment in the CPA Program), Institute of Chartered Accountants in Australia (ICAA)(enrolment in the CA Program);
*Advertising - Advertising Federation of Australia, Australian Association of National Advertisers, Australian Direct Marketing Association;
*Economics: Economic Society of Australia (Queensland Division);
*Finance: Financial Services Institute of Australasia (FINSIA);
*Human Resource Management - Australian Human Resources Institute, Australian Institute of Training and Development, Australian Institute of Management;
*International Business - Australian Institute of Export, the Logistics Association of Australia and the Chartered Institute of Purchasing;
*Management - Australian Institute of Management;
*Marketing: Australian Marketing Institute, Market Research Society of Australia, Australian Institute of Management, Australian Institute of Export (Qld) Ltd, American Marketing Association;
*Public Relations - Public Relations Institute of Australia.

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

Please contact the Course Co-ordinator ASPRO Ruth Christie (07)3138 2782 or enquiry.scitech@qut.edu.au

Bachelor of Business (Study Area A)/ Bachelor of Games and Interactive Entertainment (Study Area A)

Year 1, Semester 1
Business Faculty Core Unit - See Appendix 1

	Business Faculty Core Unit - See Appendix 1
INB180	Computer Games Studies
INB204	Special Topic 1

Year 1, Semester 2
	Business Faculty Core Unit - See Appendix 1
	Business Faculty Core Unit - See Appendix 1
INB181	Introduction to Games Production
INB104	Building IT Systems

The ITB002 unit is currently under review; further information will be available in August 2009.

Year 2, Semester 1
	Business Faculty Core Unit - See Appendix 1
	Business Faculty Core Unit - See Appendix 1
INB103	Industry Insights
	Games & Interactive Entertain Major Unit

Year 2, Semester 2
	Business Faculty Core Unit - See Appendix
	Business Faculty Core Unit - See Appendix
	Games & Interactive Entertain Major Unit
	Games & Interactive Entertain Major Unit

Year 3, Semester 1
	Business Faculty Major Unit - See Appendix
	Business Faculty Major Unit - See Appendix
	Games & Interactive Entertain Major Unit
	Games & Interactive Entertain Major Unit

Year 3, Semester 2
	Business Faculty Major Unit - See Appendix
	Business Faculty Major Unit - See Appendix
	Games & Interactive Entertainment Major Unit
	Games & Interactive Entertain Major Unit

Year 4, Semester 1
	Business Faculty Major Unit - See Appendix
	Business Faculty Major Unit - See Appendix
	Games & Interactive Entertainment Major Unit
INB379	Game Project Design

Students who choose to complete the Cooperative Education Program replace a ITB009 with ITS010

Year 4, Semester 2
	Business Faculty Major Unit - See Appendix
	Business Faculty Major Unit - See Appendix
INB380	Games Project

Bachelor of Games & Interactive Entertainment Majors Course structure

Animation
KIB105	Animation and Motion Graphics
KIB108	Animation History and Practices
KIB225	Character Development, Conceptual Design and Animation Layout
KIB203	Introduction to 3D Computer Graphics
KIB325	Real-Time 3D Computer Graphics
KIB316	Virtual Environments
KVB105	Drawing for Design
KVB106	Drawing for Animation

Digital Media
KIB101	Visual Communication
KIB102	Visual Interactions
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
INB345	Mobile Devices
KIB230	Interface and Information Design
KIB309	Embodied Interactions
KIB314	Tangible Media

Game Design
INB281	Advanced Game Design
INB280	Fundamentals of Game Design
INB272	Interaction Design
KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion
KIB214	Design for Interactive Media
AND	Two units selected from the following:
DEB201	Digital Communication
DAB110	Architectural Design 1
DTB101	Interior Design 1
DNB101	Industrial Design 1

Software Technologies*
	* Requirements for this Major is a SA or better in Queensland Maths B (or equivalent)
INB270	Programming
INB210	Databases
INB250	Systems Architecture
INB371	Data Structures and Algorithms
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
INB370	Software Development
MAB281	Mathematics for Computer Graphics
OR	null
INB304	Special Topic 3

Accountancy Major

Year 1 Semester 1	
BSB110	Accounting
BSB115	Management

Year 1 Semester 2	
BSB123	Data Analysis
BSB126	Marketing

Year 2 Semester 1	
BSB111	Business Law and Ethics
BSB113	Economics

Year 2 Semester 2	
AMB200	Consumer Behaviour
AYB225	Management Accounting

Year 3 Semester 1	
EFB210	Finance 1
AYB221	Computerised Accounting Systems

Year 3 Semester 2	
AYB219	Taxation Law
AYB340	Company Accounting

Year 4 Semester 1	
AYB230	Corporations Law
AYB321	Strategic Management Accounting

Year 4 Semester 2	
AYB301	Audit and Assurance
AYB311	Financial Accounting Issues

Advertising Major

Year 1 Semester 1	
BSB126	Marketing
BSB113	Economics

Year 1 Semester 2	
BSB110	Accounting
BSB115	Management

Year 2 Semester 1	
BSB124	Working in Business
BSB119	Global Business

Year 2 Semester 2	
AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research

Year 3 Semester 1	
BSB111	Business Law and Ethics
AMB220	Advertising Theory and Practice

Year 3 Semester 2	
AMB318	Advertising Copywriting
AMB319	Media Planning

Year 4 Semester 1	
AMB320	Advertising Management
AMB330	Advertising Planning Portfolio

Year 4 Semester 2	
AMB339	Advertising Campaigns
BSB123	Data Analysis

Economics Major

Year 1 Semester 1	
BSB113	Economics
BSB115	Management

Year 1 Semester 2	
BSB124	Working in Business
BSB123	Data Analysis

Year 2 Semester 1	
BSB110	Accounting
BSB111	Business Law and Ethics

Year 2 Semester 2	
EFB222	Quantitative Methods For Economics and Finance
EFB223	Economics 2

Year 3 Semester 1	
EFB330	Intermediate Macroeconomics
EFB331	Intermediate Microeconomics

Year 3 Semester 2	
	Choice units or remaining Faculty Core Units
	Choice units or remaining Faculty Core Units

Year 4 Semester 1	
	Choice units or remaining Faculty Core Units
	Choice units or remaining Faculty Core Units

Year 4 Semester 2	
EFB338	Contemporary Application of Economic Theory
	Choice units or remaining Faculty Core Units

Choice Units	
	Choose any three of the following:
EFB332	Applied Behavioural Economics
EFB333	Introductory Econometrics
EFB334	Environmental Economics and Policy
EFB336	International Economics

EFB337   Game Theory and Applications

Please: BSB119 and BSB126 are the remaining Faculty Core Units to be completed. Please check for unit availability when selecting Choice units.

Finance Major

Year 1 Semester 1

BSB113	Economics
BSB115	Management

Year 1 Semester 2

BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1

BSB110	Accounting
BSB111	Business Law and Ethics

Year 2 Semester 2

BSB119	Global Business
BSB123	Data Analysis

Year 3 Semester 1

EFB222	Quantitative Methods For Economics and Finance
EFB210	Finance 1

Year 3 Semester 2

EFB201	Financial Markets
EFB307	Finance 2

Year 4 Semester 1

EFB223	Economics 2
EFB335	Investments

Year 4 Semester 2

EFB312	International Finance
EFB340	Finance Capstone

Human Resources Management Major

Year 1 Semester 1

BSB113	Economics
BSB115	Management

Year 1 Semester 2

BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1

BSB110	Accounting
BSB111	Business Law and Ethics

Year 2 Semester 2

BSB123	Data Analysis
BSB119	Global Business

Year 3 Semester 1

MGB207	Human Resource Issues and Strategy
MGB220	Business Research Methods

Year 3 Semester 2

MGB200	Leading Organisations
MGB201	Contemporary Employment Relations

Year 4 Semester 1

MGB331	Learning and Development in Organisations
MGB339	Performance and Reward

Year 4 Semester 2

MGB320	Recruitment and Selection
MGB370	Personal and Professional Development

International Business Major

Year 1 Semester 1

BSB126	Marketing
BSB119	Global Business

Year 1 Semester 2

BSB110	Accounting
BSB115	Management

Year 2 Semester 1

BSB124	Working in Business
BSB123	Data Analysis

Year 2 Semester 2

BSB111	Business Law and Ethics
BSB113	Economics

Year 3 Semester 1

MGB225	Intercultural Communication and Negotiation Skills
AYB227	International Accounting

Year 3 Semester 2

AMB210	Importing and Exporting
EFB240	Finance for International Business

Year 4 Semester 1

AMB303	International Logistics
AMB336	International Marketing

Year 4 Semester 2

MGB340	International Business in the Asia-pacific
AMB369	International Business Strategy

Management Major

Year 1 Semester 1
BSB113	Economics
BSB115	Management

Year 1 Semester 2
BSB124	Working in Business
BSB126	Marketing

Year 2 Semester 1
BSB110	Accounting
BSB111	Business Law and Ethics

Year 2 Semester 2
BSB119	Global Business
BSB123	Data Analysis

Year 3 Semester 1
MGB210	Managing Operations
MGB223	Entrepreneurship and Innovation

Year 3 Semester 2
MGB200	Leading Organisations
MGB225	Intercultural Communication and Negotiation Skills

Year 4 Semester 1
MGB309	Strategic Management
MGB324	Managing Business Growth

Year 4 Semester 2
MGB310	Sustainability in A Changing Environment
MGB335	Project Management

Marketing Major

Year 1 Semester 1
BSB126	Marketing
BSB113	Economics

Year 1 Semester 2
BSB111	Business Law and Ethics
BSB115	Management

Year 2 Semester 1
BSB119	Global Business
BSB124	Working in Business

Year 2 Semester 2
BSB110	Accounting
BSB123	Data Analysis

Year 3 Semester 1
AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research

Year 3 Semester 2
AMB202	Integrated Marketing Communication
AMB240	Marketing Planning and Management

Year 4 Semester 1
AMB335	E-marketing Strategies
AMB340	Services Marketing

Year 4 Semester 2
AMB336	International Marketing
AMB359	Strategic Marketing

Public Relations Major

Year 1 Semester 1
BSB119	Global Business
BSB126	Marketing

Year 1 Semester 2
BSB110	Accounting
BSB115	Management

Year 2 Semester 1
BSB124	Working in Business
BSB113	Economics

Year 2 Semester 2
AMB263	Introduction To Public Relations
AMB264	Public Relations Techniques

Year 3 Semester 1
BSB111	Business Law and Ethics
AMB201	Marketing and Audience Research

Year 3 Semester 2
AMB372	Public Relations Planning
AMB373	Corporate Communication

Year 4 Semester 1
AMB374	Global Public Relations Cases
AMB375	Public Relations Management

Year 4 Semester 2
AMB379	Public Relations Campaigns
BSB123	Data Analysis

Potential Careers:

Account Executive, Accountant, Actuary, Administrator, Advertising Professional, Banker, Banking and Finance Professional, Business Analyst, Certified Practicing Accountant, Corporate Secretary, Economist, Financial Advisor/Analyst, Financial Project Manager, Government

Officer, Human Resource Manager, Information Officer, International Business Specialist, Manager, Marketing Officer/Manager, Public Relations Officer/Consultant.

Bachelor of Games and Interactive Entertainment/Bachelor of Mathematics (IX64)

Year offered: 2009
Admissions: Yes
CRICOS code: 063031E
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419672
Past rank cut-off: 77
Past OP cut-off: 12
Assumed knowledge: English (4,SA), Maths B (4,SA)
Total credit points: 384
Standard credit points per full-time semester: 48
Course coordinator: Associate Professor Ruth Christie (Games and Interactive Entertainment); Dr Gary Carter (Mathematics)
Campus: Gardens Point

Course overview

In this double degree students complete the requirements for two separate degrees in four years. The course consists of units in both games and interactive entertainment and mathematics. In the games and interactive entertainment component students complete core units in introductory design, games studies, professional skills and basic programming and then choose a major from the list below. In final year, students participate in a major group project to produce a significant piece of work using PC, mobile devices, consoles or virtual reality. Full time students can take part in the Cooperative Education Program, offering one year paid industry placement and credit towards their degree (subject to satisfying eligibility requirements). In mathematics, students complete core units that provide a foundation for both study and future work in mathematics and games and interactive entertainment, and then select units from the strands in applicable mathematics, mathematical modelling, computational mathematics, operations research, statistics and financial mathematics. Students are assisted throughout their course with choices to match their career aspirations and abilities. All these strands involve project work and real-world applications.

Majors: Animation and computational arts; digital media; game design; and software technologies.

Cooperative Education Program

The School of ITâs 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 youâre 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.

Contact Details

Mathematics Coordinator
Dr Gary Carter
Phone: +61 7 3138 5090
Email: g.carter@qut.edu.au

Information Technology Coordinator
ASPRO Ruth Christie
Phone: +61 7 3138 2782
Email: enquiry.scitech@qut.edu.au

Course Structure for Students with Four Semesters of Senior Mathematics B and Senior Mathematics C

Year 1, Semester 1	
INB180	Computer Games Studies
INB204	Special Topic 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C

Year 1, Semester 2	
INB181	Introduction to Games Production
INB103	Industry Insights
MAB101	Statistical Data Analysis 1
MAB220	Computational Mathematics 1

Year 2, Semester 1	
INB103	Industry Insights
	Games & Interactive Entertain Major Unit
MAB210	Statistical Modelling 1
MAB312	Linear Algebra

Year 2, Semester 2	
	Games & Interactive Entertain Major Unit
	Games & Interactive Entertain Major Unit
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 3, Semester 1	
	Games & Interactive Entertain Major
	Games & Interactive Entertain Major
MAB311	Advanced Calculus
	Level 2 or 3 Maths Unit

Year 3, Semester 2	
	Games & Interactive Entertain Major
	Games & Interactive Entertain Major
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 4, Semester 1

INB301	The Business of IT
	Games & Interactive Entertain Major
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit
	Students who choose to complete the Cooperative Education Program replace ITB009 with ITS010

Year 4, Semester 2

INB380	Games Project
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Course Structure for Students with Four Semesters of Senior Mathematics B Only

Year 1, Semester 1

INB180	Computer Games Studies
INB204	Special Topic 1
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1

Year 1, Semester 2

INB181	Introduction to Games Production
INB104	Building IT Systems
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C

Year 2, Semester 1

INB103	Industry Insights
	Games and Interactive Entertain Major Unit
MAB220	Computational Mathematics 1
MAB312	Linear Algebra

Year 2, Semester 2

	Games and Interactive Entertain Major Unit
	Games and Interactive Entertain Major Unit
MAB210	Statistical Modelling 1
	Level 2 or 3 Maths Unit

Year 3, Semester 1

	Games and Interactive Entertain Major Unit
	Games and Interactive Entertain Major Unit
MAB311	Advanced Calculus
	Level 2 or 3 Maths Unit

Year 3, Semester 2

	Games and Interactive Entertain Major Unit
	Games and Interactive Entertain Major Unit
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 4, Semester 1

INB379	Game Project Design
	Games and Interactive Entertain Major Unit
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Year 4, Semester 2

INB380	Games Project
	Level 2 or 3 Maths Unit
	Level 2 or 3 Maths Unit

Bachelor of Games & Interactive Entertainment Majors Course structure

Animation

KIB105	Animation and Motion Graphics
KIB108	Animation History and Practices
KIB225	Character Development, Conceptual Design and Animation Layout
KIB203	Introduction to 3D Computer Graphics
KIB325	Real-Time 3D Computer Graphics
KIB316	Virtual Environments
KVB105	Drawing for Design
KVB106	Drawing for Animation

Digital Media

KIB101	Visual Communication
KIB102	Visual Interactions
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
INB345	Mobile Devices
KIB230	Interface and Information Design
KIB309	Embodied Interactions
KIB314	Tangible Media

Game Design

INB281	Advanced Game Design
INB280	Fundamentals of Game Design
INB272	Interaction Design
KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion
KIB214	Design for Interactive Media
AND	Two units selected from the following:
DEB201	Digital Communication
DAB110	Architectural Design 1
DTB101	Interior Design 1
DNB101	Industrial Design 1

Software Technologies*

	* Requirements for this Major is a SA or better

	in Queensland Maths B (or equivalent)
INB270	Programming
INB210	Databases
INB250	Systems Architecture
INB371	Data Structures and Algorithms
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
INB370	Software Development
MAB281	Mathematics for Computer Graphics
OR	null
INB304	Special Topic 3

Mathematics Units

Level 2 Units	
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2
MAB315	Operations Research 2
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB420	Computational Mathematics 2
MAB422	Mathematical Modelling
MAB461	Discrete Mathematics
MAB480	Introduction to Scientific Computation
MAB481	Visualisation and Data Analysis
	Note: MAB311 Advanced Calculus and MAB312 Linear Algebra are mandatory units.

Level 3 Units - at least 4 units must be selected	
MAB521	Applied Mathematics 3
MAB522	Computational Mathematics 3
MAB524	Statistical Inference
MAB525	Operations Research 3A
MAB533	Statistical Techniques
MAB536	Time Series Analysis
MAB613	Partial Differential Equations
MAB623	Financial Mathematics
MAB624	Applied Statistics 3
MAB625	Operations Research 3B
MAB640	Industry Project
MAB672	Advanced Mathematical Modelling
MAB681	Advanced Visualisation and Data Analysis
	Note: MAB523 Introduction to Quality Management and MAB621 Discrete Mathematics do not contribute to the mandatory 48 credit points minimum from Level 3 Mathematics units.

Potential Careers:

Actuary, Computer Game Programmer, Market Research Manager, Mathematician, Quantitative Analyst, Statistician.

Bachelor of Applied Science/Bachelor of Games and Interactive Entertainment (IX65)

Year offered: 2009
Admissions: Yes
CRICOS code: 063032D
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419682
Past rank cut-off: 75
Past OP cut-off: 13
Assumed knowledge: English (4,SA), Maths B (4,SA)
Total credit points: 384
Standard credit points per full-time semester: 48
Course coordinator: Dr Perry Hartfield (Science), Associate Professor Ruth Christie (Information Technology)
Discipline coordinator: Dr Perry Hartfield (Biochemistry); Dr Marion Bateson (Biotechnology); Dr Robert Johnson (Chemistry); Dr Ian Williamson (Ecology); Dr Robin Thwaites (Environmental Science); Dr Emad Kiriakous (Forensic Science); Dr Gary Huftile (Geoscience); Dr Christine Knox (Microbiology); Dr Greg Michael (Physics)
Campus: Gardens Point

Course overview

In this double degree students complete the requirements for two separate degrees in four years. The course consists of units in both applied science and games and interactive entertainment. In the science component students complete a set of core units in science to support advanced level studies in specialist areas. Students select a science major as outlined below and undertake laboratory work and may participate in fieldwork. In the games and interactive entertainment component students complete core units in introductory design, games studies, professional skills and basic programming and then choose a major from the list below. In final year, students participate in a major group project to produce a significant piece of work using PC, mobile devices, consoles or virtual reality. Full time students can take part in the Cooperative Education Program, offering one year paid industry placement and credit towards their degree (subject to satisfying eligibility requirements).

Majors:
Science: biochemistry; biotechnology; chemistry; ecology; environmental science; forensic science; geoscience; microbiology; and physics.
Games and Interactive Entertainment: animation and computational arts; digital media; game design; and software technologies.

Recommended Study

At least one of the sciences. For the majors in biochemistry, biotechnology and microbiology - Biological Science and Chemistry are recommended; for the major in physics - Maths C is recommended.

Cooperative Education Program

The School of IT′s Cooperative Education Program gives you the opportunity of 10-12 months paid industry placement during your course where you can integrate real experience with what you′re learning in your degree. Companies that QUT's Coop Ed students have worked with include Energex, Boeing, CITEC, CSC Mining, Environmental Protection Agency, Dialog, UNiTAB, RACQ and many Queensland Government departments. The Coop Ed Program is available to Australian citizens and permanent residents only.

Find out more about the Cooperative Education Program.

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.

Contact Details

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Discipline Coordinators

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Bachelor of Applied Science(Study Area A)/Bachelor of Games and Interactive Entertain (Study Area A

Year 1, Semester 1	
	Applied Science Unit
	Applied Science Unit
INB180	Computer Games Studies
INB204	Special Topic 1

Year 1, Semester 2	
	Applied Science Unit
	Applied Science Unit
INB181	Introduction to Games Production
INB104	Building IT Systems

Year 2, Semester 1	
	Applied Science Unit
	Applied Science Unit
INB103	Industry Insights
	Games & Interactive Entertainment Major Unit

Year 2, Semester 2	
	Applied Science Unit
	Applied Science Unit
	Games & Interactive Entertainment Major Unit
	Games & Interactive Entertainment Major Unit

Year 3, Semester 1	
	Applied Science Unit
	Applied Science Unit
	Games & Interactive Entertainment Major Unit
	Games & Interactive Entertainment Major Unit

Year 3, Semester 2	
	Applied Science Unit

	Applied Science Unit
	Games & Interactive Entertainment Major Unit
	Games & Interactive Entertainment Major Unit

Year 4, Semester 1	
	Applied Science Unit
	Applied Science Unit
INB301	The Business of IT
	Students who choose to complete the Cooperative Education Program replace ITB009 with ITS010

Year 4, Semester 2	
	Applied Science Unit
	Applied Science Unit
INB380	Games Project

Course structure - Major in Biochemistry

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2	
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation

Year 3, Semester 2	
LQB481	Biochemical Pathways and Metabolism
LQB483	Molecular Biology Techniques

Year 4, Semester 1	
LQB581	Functional Biochemistry
LQB582	Biomedical Research Technologies

Year 4, Semester 2	
LQB681	Biochemical Research Skills
LQB682	Protein Biochemistry and Bioengineering

Course structure - Major in Biotechnology

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation

Year 3, Semester 2

LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics

Year 4, Semester 1

	TWO units selected from:
LQB583	Genetic Research Technology
LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation

Year 4, Semester 2

	TWO units selected from:
LQB682	Protein Biochemistry and Bioengineering
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions

Course structure - Major in Chemistry

Year 1, Semester 1

SCB111	Chemistry 1
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

SCB112	Cellular Basis of Life
SCB121	Chemistry 2

Year 2, Semester 1

MAB100	Mathematical Sciences 1A
SCB110	Science Concepts and Global Systems

Year 2, Semester 2

SCB123	Physical Science Applications
SCB131	Experimental Chemistry

Year 3, Semester 1

PQB312	Analytical Chemistry For Scientists and Technologists
PQB331	Structure and Bonding

Year 3, Semester 2

PQB401	Reaction Kinetics, Thermodynamics and Mechanisms
PQB442	Chemical Spectroscopy

Year 4, Semester 1

PQB502	Materials Chemistry and Characterisation
PQB531	Organic Mechanisms and Synthesis

Year 4, Semester 2

PQB631	Advanced Inorganic Chemistry
PQB642	Chemical Research

Course structure - Major in Ecology

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB122	Cell and Molecular Biology

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

NQB201	Planet Earth
NQB202	History of Life on Earth

Year 3, Semester 1

NQB302	Earth Surface Systems
NQB321	Ecology

Year 3, Semester 2

NQB421	Experimental Design
NQB422	Genetics and Evolution

Left Column:

Year 4, Semester 1	
NQB521	Population Genetics and Molecular Ecology
NQB523	Population Management

Year 4, Semester 2	
NQB622	Conservation Biology
NQB623	Ecological Systems

Course structure - Major in Environmental Science

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2	
NQB202	History of Life on Earth
SCB123	Physical Science Applications

Year 3, Semester 1	
NQB302	Earth Surface Systems
NQB321	Ecology

Year 3, Semester 2	
NQB403	Soils and the Environment
NQB421	Experimental Design

Year 4, Semester 1	
NQB501	Environmental Modelling
NQB502	Field Mapping and Monitoring of Natural Resources

Year 4, Semester 2	
NQB601	Sustainable Environmental Management
NQB602	Environmental Chemistry

Course structure - Major in Forensic Science

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
SCB121	Chemistry 2

Right Column:

SCB122	Cell and Molecular Biology

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2	
SCB123	Physical Science Applications
SCB131	Experimental Chemistry

Year 3, Semester 1	
LQB383	Molecular and Cellular Regulation
SCB384	Forensic Sciences - From Crime Scene to Court

Year 3, Semester 2	
JSB979	Forensic Scientific Evidence
PQB312	Analytical Chemistry For Scientists and Technologists

Year 4, Semester 1	
PQB513	Instrumental Analysis
PQB584	Forensic Physical Evidence

Year 4, Semester 2	
LQB680	Forensic DNA Profiling
PQB684	Forensic Analysis

Course structure - Major in Geoscience

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
NQB201	Planet Earth
SCB123	Physical Science Applications

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2	
NQB202	History of Life on Earth
SCB222	Exploration of the Universe

Year 3, Semester 1	
NQB311	Mineralogy

NQB314	Sedimentary Geology

Year 3, Semester 2

NQB411	Petrology of Igneous and Metamorphic Rocks
NQB412	Structural Geology and Field Methods

Year 4, Semester 1

NQB502	Field Mapping and Monitoring of Natural Resources
NQB513	Geophysics

Year 4, Semester 2

NQB602	Environmental Chemistry
NQB614	Groundwater Systems

Course structure - Major in Microbiology

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Plus either:
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 2, Semester 2

SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB386	Microbial Structure and Function

Year 3, Semester 2

LQB483	Molecular Biology Techniques
LQB486	Clinical Microbiology 1

Year 4, Semester 1

LQB586	Clinical Microbiology 2
LQB587	Applied Microbiology 1: Water, Air and Soil

Year 4, Semester 2

LQB686	Microbial Technology and Immunology
LQB687	Applied Microbiology 2: Food and Quality Assurance

Course structure - Major in Physics

Year 1, Semester 1

MAB111	Mathematical Sciences 1B
SCB111	Chemistry 1

Year 1, Semester 2

MAB112	Mathematical Sciences 1C
PQB250	Mechanics and Electromagnetism

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
SCB112	Cellular Basis of Life

Year 2, Semester 2

MAB220	Computational Mathematics 1
PQB251	Waves and Optics

Year 3, Semester 1

MAB311	Advanced Calculus
PQB350	Thermodynamics of Solids and Gases

Year 3, Semester 2

PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation

Year 4, Semester 1

PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques

Year 4, Semester 2

PQB650	Advanced Theoretical Physics
PQB651	Experimental Physics

Bachelor of Games & Interactive Entertainment Majors Course structure

Animation

KIB105	Animation and Motion Graphics
KIB108	Animation History and Practices
KIB225	Character Development, Conceptual Design and Animation Layout
KIB203	Introduction to 3D Computer Graphics
KIB325	Real-Time 3D Computer Graphics
KIB316	Virtual Environments
KVB105	Drawing for Design
KVB106	Drawing for Animation

Digital Media

KIB101	Visual Communication
KIB102	Visual Interactions
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
INB345	Mobile Devices
KIB230	Interface and Information Design

| KIB309 | Embodied Interactions |
| KIB314 | Tangible Media |

Game Design

INB281	Advanced Game Design
INB280	Fundamentals of Game Design
INB272	Interaction Design
KIB201	Concept Development for Game Design and Interactive Media
KIB202	Enabling Immersion
KIB214	Design for Interactive Media
AND	Two units selected from the following:
DEB201	Digital Communication
DAB110	Architectural Design 1
DTB101	Interior Design 1
DNB101	Industrial Design 1

Software Technologies*

	* Requirements for this Major is a SA or better in Queensland Maths B (or equivalent)
INB270	Programming
INB210	Databases
INB250	Systems Architecture
INB371	Data Structures and Algorithms
INB381	Modelling and Animation Techniques
INB382	Real Time Rendering Techniques
INB370	Software Development
MAB281	Mathematics for Computer Graphics
OR	null
INB304	Special Topic 3

Potential Careers:

Air Traffic Controller, Analytical Chemist, Astrophysicist, Biochemist, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Ecologist, Environmental Scientist, Exploration Geologist, Forensic Biologist, Forensic Chemist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, Laboratory Technician (Chemistry), Marine Scientist, Medical Biotechnologist, Medical Physicist, Microbiologist, Mine Geologist, Molecular Biologist, Natural Resource Scientist, Pharmaceutical Research Scientist, Physicist, Plant Biotechnologist, Population Ecologist, Research and Development Chemist, Virologist.

Bachelor of Fine Arts (Interactive and Visual Design) / Bachelor of Information Technology (IX69)

Year offered: 2009
Admissions: Yes
Course duration (full-time): 4 years
Domestic fees (indicative): 2009 CSP $3,153 (indicative) per semester
International Fees (per semester): 2009: $10,000 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 409612
Past rank cut-off: 82
Past OP cut-off: 10
OP Guarantee: Yes
Assumed knowledge: English (4 SA), Maths A, B or C (4 SA)
Total credit points: 384
Course coordinator: Head, Undergraduate Studies (Creative Industries) - cifug@qut.edu.au, Mr Richard Thomas (enquiry.scitech@qut.edu.au) (IT)
Discipline coordinator: Mr Gavin Sade (Interactive and Visual Design)
Campus: Gardens Point and Kelvin Grove

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 graduateâs parchment. Instead, it will have specialisations. The specialisation areas that will be available for students will include:
â¢ Business Process Management
â¢ Data Warehousing
â¢ Digital Environments
â¢ Enterprise Systems
â¢ Information Management
â¢ Network Systems
â¢ Software Engineering
â¢ Web Technologies

Entry Requirements

Year 12 or equivalent
Prerequisites: Nil
Assumed Knowledge: English (4,SA), Maths A, B or C (4,SA)
Primary Fields: B or C
Secondary Fields: B or C
OP Guarantee: Yes

Course Description

This degree equips you to build and apply creative, innovative IT solutions across diverse industries. A hands-on, real world based curriculum gives you the opportunity to explore a wide range of areas within the two strands of this degree, and gain deep understanding within your chosen area speciality, such as networking, software engineering, data warehousing, business process modelling, enterprise systems, information management, web technologies, or digital societies. You will experience an innovative, hands-on approach to learning through projects where you develop IT systems. You will be able to gain entrepreneurial skills if you wish to learn how to develop an idea into a commercial opportunity. You learn to harness your creativity and people skills to maximise the impact of your technical know-how in the booming IT marketplace. It positions you for a challenging and rewarding career within the global economy. Full-time students are eligible for the Cooperative Education Program; paid industry work experience with credit towards your degree. Students are also offered many other work-integrated learning opportunities where you receive first-hand industry experience.

Interactive and visual design is at the cutting edge of technological applications of creativity.

The interactive and visual design major will set you up for careers in the rapidly expanding fields of contemporary communication and the application of new media technologies.

You will be immersed in your Interactive and Visual Design major with 14 studio units, and have a broad creative industries perspective from the two foundation units. Your information technology degree component comprises eight core units and eight units in your information technology major.

International Students

English language requirements
In addition to the above academic entry requirements, international students must meet the Universityâs English language requirements of IELTS of 6.5 (with no lower than 6.0 for any one band).

Pathways to Futher Studies

In 2001, an accelerated Honours program was introduced to increase the number of Bachelor of Information Technology students continuing their studies to complete the Honours year. The program allowed selected high achieving students the opportunity to undertake one postgraduate unit in the final semester of their a BIT degree (or double degree) which would be counted both for completion of the degree and towards the Honours program. The program also provided students with the opportunity to commence their Honours studies over the Summer Semester.

An alternative to the Honours program is the Master of Information Technology (Research). Students who complete a BIT degree (or double degree) with a grade point average equal to, or greater than 5 (7 point scale) and who have decided against enrolling in an Honours program, could undertake this course. In addition, students may wish to enrol in the 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.

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as

questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Cooperative Education

The School of ITâs 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 youâre 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.

Full time course structure

Year 1, Semester 1	
INB101	Impact of IT
INB102	Emerging Technology
KIB101	Visual Communication
KKB101	Creative Industries: People and Practices

Year 1, Semester 2	
INB103	Industry Insights
INB104	Building IT Systems
KIB103	Introduction to Web Design and Development
KKB102	Creative Industries: Making Connections

Year 2, Semester 1	
	IT Breadth Option Unit
	IT Breadth Option Unit
KIB105	Animation and Motion Graphics
KVB105	Drawing for Design

Year 2, Semester 2	
INB201	Scalable Systems Development
	IT Specialist Option
KIB102	Visual Interactions
KIB104	Digital Media

Year 3, Semester 1	
INB201	Scalable Systems Development
	IT Specialist Option Unit
KIB214	Design for Interactive Media
SELECT:	Either KIB230 or KKB216
KIB230	Interface and Information Design
KKB216	Graphical Development Environments for Media Interaction

Year 3, Semester 2	
INB300	Professional Practice in IT
	IT Specialist Option Unit
KIB216	Advanced Web Design
SELECT:	Either KIB205 or KVB204
KIB205	Programming for Visual Designers and Artists
KVB204	Graphic Design

Year 4, Semester 1	
INB301	The Business of IT
	IT Specialist Option Unit
KIB315	Contemporary Issues in Digital Media
SELECT:	Either KIB309 or KIB335
KIB309	Embodied Interactions
KIB335	Typography and Illustration

Year 4, Semester 2	
INB302	Capstone Project
	IT Specialist Option Unit
KIB322	Design Project
SELECT:	Either KIB314 or KIB338
KIB314	Tangible Media
KIB338	Print Media

IT Breadth Option Unit List

IT Breadth Option Units	
	You must complete four (4) units from the following list. You should not commence these units until you have completed INB101, INB102, INB103 and INB104.
INB120	Corporate Systems
INB210	Databases
INB220	Business Analysis
INB250	Systems Architecture
INB251	Networks
INB255	Security
INB270	Programming
INB271	The Web
INB272	Interaction Design

IT Specialisation Option Unit List

IT Specialist Option Units	
	You must complete four (4) 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. The units are grouped in areas to assist you in focusing your studies.
1.	Enterprise Systems:

INB123	Project Management Practice
INB221	Technology Management
INB311	Enterprise Systems
INB312	Enterprise Systems Applications
2.	Web Technologies:
INB313	Electronic Commerce Site Development
INB373	Web Application Development
INB374	Enterprise Software Architecture
INB385	Multimedia Systems
INB386	Advanced Multimedia Systems
3.	Business Process Management:
INB320	Business Process Modelling
INB321	Business Process Management
INB322	Information Systems Consulting
INB323	Smart Services
4.	Information Management:
INB330	Information Management
INB331	Management Issues for Info Professionals
INB332	Information Retrieval
INB333	Information Programs
INB334	Information Issues and Values
INB335	Information Resources
5.	Data Warehousing:
INB340	Database Design
INB341	Software Development With Oracle
INB342	Enterprise Data Mining
INB343	Advanced Data Mining and Data Warehousing
6.	Network Systems:
INB350	Internet Protocols and Services
INB351	Computer Network Administration
INB352	Network Planning and Deployment
INB353	Wireless and Mobile Networks
7.	Software Engineering:
INB370	Software Development
INB371	Data Structures and Algorithms
INB372	Software Engineering Principles
INB374	Enterprise Software Architecture
8.	Ungrouped:
INB204	Special Topic 1
INB205	Special Topic 2
INB304	Special Topic 3
INB305	Special Topic 4
INB306	Project 1
INB307	Project 2
INB308	Project 3
INB355	Cryptology and Protocols
INB365	Systems Programming

INB860	Computational Intelligence for Control and Embedded Systems
9.	Digital Environments:
INB345	Mobile Devices
INB346	Enterprise 2.0
INB347	Web 2.0 Applications
INB334	Information Issues and Values

Potential Careers:

Academic, Advertising Professional, Animator, Computer Game Programmer, Computer Games Developer, Digital Composer, Government Officer, Information Officer, Information Security Specialist, Internet Professional, Marketing Officer/Manager, Media Industry Specialist, Multimedia Designer, Organisational Communication Specialist, Post-production specialist, Publishing Professional, Technical Officer, Web Designer.

Bachelor of Applied Science / Bachelor of Laws (IX72)

Year offered: 2009
Admissions: Yes
CRICOS code: 066294B
Course duration (full-time): 5.5 years
International Fees (per semester): 2009: $11,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 419712
Past rank cut-off: 91
Past OP cut-off: 6
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 528
Standard credit points per full-time semester: 48
Course coordinator: Dr Perry Hartfield (Science); Dr Bill Dixon (Law)
Discipline coordinator: Dr Perry Hartfield (Biochemistry); Dr Marion Bateson (Biotechnology); Dr Robert Johnson (Chemistry); Dr Ian Williamson (Ecology); Dr Robin Thwaites (Environmental Science); Dr Emad Kiriakous (Forensic Science); Dr Gary Huftile (Geoscience); Dr Christine Knox (Microbiology); Dr Greg Michael (Physics)
Campus: Gardens Point

OP Guarantee

The OP Guarantee will apply to this course.

Career Outcomes

The defining nature of the QUT Bachelor of Laws is its real-world applied nature which will equip you with the high quality knowledge and skills and that meet the needs of the legal profession, government, business and industry. In developing the LLB the Faculty recognises that graduates are increasingly seeking a broad range of careers including, but not limited to, legal practice.

The flexible nature of the degree provides students with an opportunity to undertake a series of elective streams. These streams group legal content and legal skills units into alignment with the varied career destinations which a legal education opens to graduates and will allow you to study areas of the law that match your career aspirations.

Career opportunities include private practice as a barrister and/or solicitor; work in government departments; employment as an in-house lawyer; and a range of other occupations.

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.

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.

Professional Recognition

Graduates will satisfy the requirements of membership in the relevant professional body for their chosen science major. See the Bachelor of Applied Science (SC01) course for details.

The QUT Bachelor of Laws course is an approved degree for the purposes of the Legal Practitioners Admission Rules. Accordingly, it enables graduates to satisfy the academic requirements for admission to practise as a solicitor and/or barrister in all Australian states and territories. The QUT LLB degree qualification is also recognised for admission purposes in West and East Malaysia, Fiji and Papua New Guinea.

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Physics
Dr Greg Michael
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Email: g.michael@qut.edu.au

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Course structure - Law

Year 1, Semester 1	
LWB145	Legal Foundations A
LWB147	Torts A

Year 1, Semester 2	
LWB146	Legal Foundations B
LWB148	Torts B

Year 2, Semester 1	
LWB136	Contracts A
LWB238	Fundamentals of Criminal Law

Year 2, Semester 2	
LWB137	Contracts B

LWB239	Criminal Responsibility

Year 3, Semester 1	
LWB240	Principles of Equity
LWB243	Property Law A

Year 3, Semester 2	
LWB241	Trusts
LWB244	Property Law B

Year 4, Semester 1	
LWB242	Constitutional Law
LWB432	Evidence

Year 4, Semester 2	
LWB334	Corporate Law
	Law Elective

Year 5, Semester 1	
LWB335	Administrative Law
LWB431	Civil Procedure
	Law Elective
	Law Elective

Year 5, Semester 2	
LWB433	Professional Responsibility
	Law Elective
	Law Elective
	Law Elective

Year 6, Semester 1	
	Law Elective
	Law Elective
	Law Elective
	Law Elective

Electives	
LWB302	Family Law
LWB306	Planning Law
LWB307	Insolvency Law
LWB308	Australian Employment Law
LWB309	Succession
LWB312	Real Estate Transactions
LWB313	Discrimination & Equal Opportunity Law
LWB333	Theories of Law
LWB364	Introduction to Taxation Law
LWB366	Law of Commercial Entities
LWB406	Fundamentals of Public International Law
LWB407	Private International Law
LWB421	Learning in Professional Practice
LWB435	Legal Research in Practice

LWB480	Media Law
LWB482	Internet Law
LWB483	Medico-Legal Issues
LWB484	Electronic Commerce and Technology Contracts
LWB485	Environmental Law
LWB486	Intellectual Property Law
LWB489	Native Title Law and Practice
LWB496	Human Rights Law
LWB498	Dispute Resolution and Non-adversarial Practice

Electives - Restricted Entry Units

LWB356	Advocacy
LWB361	Drafting
LWB413	Queensland Parliamentary Internship Program
LWB417	Moots
LWB418	Competition Moots 1
LWB420	Internship
LWB422	Virtual Law Placement
LWB456	Legal Clinic (Organised Program)
LWB495	E-Litigation
LWB497	Advanced Research Project
LWB499	Creative Commons Clinic

Course structure - Major in Biochemistry

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology

Year 2, Semester 1

SCB110	Science Concepts and Global Systems

Year 2, Semester 2

SCB123	Physical Science Applications

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation

Year 3, Semester 2

LQB481	Biochemical Pathways and Metabolism

LQB483	Molecular Biology Techniques

Year 4, Semester 1

LQB581	Functional Biochemistry
LQB582	Biomedical Research Technologies

Year 4, Semester 2

LQB681	Biochemical Research Skills
LQB682	Protein Biochemistry and Bioengineering

Course structure - Major in Biotechnology

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology

Year 2, Semester 1

SCB110	Science Concepts and Global Systems

Year 2, Semester 2

SCB123	Physical Science Applications

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation

Year 3, Semester 2

LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics

Year 4, Semester 1

	Select TWO units from:
LQB583	Genetic Research Technology
LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation

Year 4, Semester 2

	Select TWO units from:
LQB682	Protein Biochemistry and Bioengineering
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions

Course structure - Major in Chemistry

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

MAB100	Mathematical Sciences 1A
SCB121	Chemistry 2
SCB131	Experimental Chemistry

Year 2, Semester 1

| SCB110 | Science Concepts and Global Systems |

Year 2, Semester 2

| SCB123 | Physical Science Applications |

Year 3, Semester 1

| PQB312 | Analytical Chemistry For Scientists and Technologists |
| PQB331 | Structure and Bonding |

Year 3, Semester 2

| PQB401 | Reaction Kinetics, Thermodynamics and Mechanisms |
| PQB442 | Chemical Spectroscopy |

Year 4, Semester 1

| PQB502 | Materials Chemistry and Characterisation |
| PQB531 | Organic Mechanisms and Synthesis |

Year 4, Semester 2

| PQB631 | Advanced Inorganic Chemistry |
| PQB642 | Chemical Research |

Course structure - Major in Ecology

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

NQB201	Planet Earth
NQB202	History of Life on Earth
SCB120	Plant and Animal Physiology

Year 2, Semester 1

| SCB110 | Science Concepts and Global Systems |

Year 2, Semester 2

| SCB123 | Physical Science Applications |

Year 3, Semester 1

NQB321	Ecology
	Plus either
NQB322	Invertebrate Biology
	Or
NQB323	Plant Biology

Year 3, Semester 2

| NQB421 | Experimental Design |
| NQB422 | Genetics and Evolution |

Year 4, Semester 1

| NQB521 | Population Genetics and Molecular Ecology |
| NQB523 | Population Management |

Year 4, Semester 2

| NQB622 | Conservation Biology |
| NQB623 | Ecological Systems |

Course structure - Major in Environmental Science

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

NQB202	History of Life on Earth
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2

Year 2, Semester 1

| SCB110 | Science Concepts and Global Systems |

Year 2, Semester 2

| SCB123 | Physical Science Applications |

Year 3, Semester 1

| NQB302 | Earth Surface Systems |
| NQB321 | Ecology |

Year 3, Semester 2

| NQB403 | Soils and the Environment |
| NQB421 | Experimental Design |

Year 4, Semester 1

| NQB501 | Environmental Modelling |

NQB502	Field Mapping and Monitoring of Natural Resources

NQB601	Sustainable Environmental Management
NQB602	Environmental Chemistry

Course structure - Major in Forensic Science

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

SCB121	Chemistry 2
SCB122	Cell and Molecular Biology
SCB131	Experimental Chemistry

Year 2, Semester 1

SCB110	Science Concepts and Global Systems

Year 2, Semester 2

SCB123	Physical Science Applications

Year 3, Semester 1

LQB383	Molecular and Cellular Regulation
SCB384	Forensic Sciences - From Crime Scene to Court

Year 3, Semester 2

JSB979	Forensic Scientific Evidence
PQB312	Analytical Chemistry For Scientists and Technologists

Year 4, Semester 1

PQB513	Instrumental Analysis
PQB584	Forensic Physical Evidence

Year 4, Semester 2

LQB680	Forensic DNA Profiling
PQB684	Forensic Analysis

Course structure - Major In Geoscience

Year 1, Semester 1

SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
	Either
MAB101	Statistical Data Analysis 1
	Or

MAB105	Preparatory Mathematics

Year 1, Semester 2

NQB201	Planet Earth
NQB202	History of Life on Earth
SCB222	Exploration of the Universe

Year 2, Semester 1

SCB112	Cellular Basis of Life

Year 2, Semester 2

SCB123	Physical Science Applications

Year 3, Semester 1

NQB311	Mineralogy
NQB314	Sedimentary Geology

Year 3, Semester 2

NQB411	Petrology of Igneous and Metamorphic Rocks
NQB412	Structural Geology and Field Methods

Year 4, Semester 1

NQB502	Field Mapping and Monitoring of Natural Resources
NQB513	Geophysics

Year 4, Semester 2

NQB614	Groundwater Systems
NQB615	Geochemistry

Course structure - Major in Microbiology

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Either
MAB101	Statistical Data Analysis 1
	Or
MAB105	Preparatory Mathematics

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology

Year 2, Semester 1

SCB110	Science Concepts and Global Systems

Year 2, Semester 2

SCB123	Physical Science Applications

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB386	Microbial Structure and Function

Year 3, Semester 2

LQB483	Molecular Biology Techniques
LQB486	Clinical Microbiology 1

Year 4, Semester 1

LQB586	Clinical Microbiology 2
LQB587	Applied Microbiology 1: Water Air and Soil

Year 4, Semester 2

LQB686	Microbial Technology and Immunology
LQB687	Applied Microbiology 2: Food and Quality Assurance

Course structure - Major in Physics

Year 1, Semester 1

SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
	Either
MAB100	Mathematical Sciences 1A
	Or
MAB111	Mathematical Sciences 1B

Year 1, Semester 2

MAB112	Mathematical Sciences 1C
PQB250	Mechanics and Electromagnetism
PQB251	Waves and Optics

Year 2, Semester 1

SCB112	Cellular Basis of Life

Year 2, Semester 2

MAB111	Mathematical Sciences 1B
	Or
MAB220	Computational Mathematics 1

Year 3, Semester 1

MAB311	Advanced Calculus
PQB350	Thermodynamics of Solids and Gases

Year 3, Semester 2

PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation

Year 4, Semester 1

PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques

Year 4, Semester 2

PQB650	Advanced Theoretical Physics
PQB651	Experimental Physics

Potential Careers:

Analytical Chemist, Astrophysicist, Barrister, Biochemist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Crown Law Officer, Ecologist, Environmental Scientist, Forensic Chemist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, In-House Lawyer, Industrial Chemist, Laboratory Technician (Chemistry), Marine Scientist, Medical Biotechnologist, Medical Physicist, Microbiologist, Mine Geologist, Natural Resource Scientist, Physicist, Plant Biotechnologist, Population Ecologist, Scientist, Solicitor, Virologist.

Graduate Certificate in Research Commercialisation (IX97)

Year offered: 2009
Admissions: Yes
CRICOS code: not available
Course duration (full-time): 1 semester. Subject to maximum time limit of 4 years.
Course duration (part-time): 2 semesters. Subject to maximum time limit of 4 years.
Domestic fees (indicative): 2009: $9,200 per semester
International Fees (per semester): 2009: $10,400 per semester *(subject to annual review)*
Course coordinator: Professor Rod Wissler
Campus: Internet

New heading

New text

course structure

Course structure	
IFP100	Knowledge Transfer and Research Commercialisation (Core Unit)
IFP101	Leadership and Workplace Communication
IFP102	Project Management and Research
IFP103	Public Policy and Research
IFP104	Entrepreneurial Foundations
IFP105	Principles and Practice of Research Management
IFP106	Managing Research Careers
IFP107	Global Sustainability
IFP108	Strategic Issues in Research Management

Potential Careers:

Academic, Administrator, Arts Administrator, Biochemist, Bioengineer, Bioinformatician, Biologist, Biomechanical Engineer, Biomedical Engineer, Biotechnologist, Biotechnologist, Biotechnology Business/Investment Analyst, Business Analyst, Business Development Officer, Cell Biologist, Civil Engineer, Contract Administrator, Financial Advisor/Analyst, Government Officer, International Business Specialist, Marine Scientist, Market Research Manager, Marketing Officer/Manager, Mathematician, Microbiologist, Policy Officer, Public Servant, Scientist, Social Scientist, Urban Designer, Visual Artist, Web Designer.

Master of Research and Development Management (IX99)

Year offered: 2009
Admissions: Yes
Course duration (full-time): 3 semesters.
Course duration (part-time): 6 semesters.
International Fees (per semester): 2009: $9,200 per semester *(subject to annual review)*
International Fees (indicative): 2009: $10,400 per semester
Course coordinator: Professor Rod Wissler
Campus: Internet

Entry Requirements

The minimum entry requirement for this course is a four year undergraduate degree or three years plus either an honours year or postgraduate coursework year in any discipline. Applicants who do not meet these academic requirements may be eligible to enter the course on the basis of professional activities completed in research management, research commercialisation or related fields that satisfies the course coordinator.

Course structure

IFP110	
IFP100	Knowledge Transfer and Research Commercialisation
IFP101	Leadership and Workplace Communication
IFP102	Research Project Management
IFP103	Public Policy and Research
IFP104	Entrepreneurial Foundations
IFP105	Principles and Practice of Research and Development Management
IFP106	Managing Research Careers
IFP107	Global Sustainability
IFP108	Strategic Issues in Research and Development Management
IFP109	Contexts for Research and Development Management
IFP110	Research & Development Management Project 1
IFP111	Research & Development Management Project 1

Potential Careers:

Academic, Administrator, Biochemist, Bioengineer, Bioinformatician, Biologist, Biomechanical Engineer, Biomedical Engineer, Biotechnologist, Biotechnology Business/Investment Analyst, Business Analyst, Business Development Officer, Cell Biologist, Civil Engineer, Contract Administrator, Financial Advisor/Analyst, Government Officer, International Business Specialist, Marine Scientist, Market Research Manager, Marketing Officer/Manager, Mathematician, Microbiologist, Policy Officer, Public Servant, Scientist, Social Scientist, Urban Designer, Visual Artist, Web Designer.

Bachelor of Applied Science (Medical Science) (LS37)

Year offered: 2009
Admissions: Yes
CRICOS code: 020331D
Course duration (full-time): 3 Years
Course duration (part-time): 6 Years
Domestic fees (indicative): 2009: CSP $3,698 (indicative) per semester
International Fees (per semester): 2009: $11,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February and July (Conditions apply for July entry)
QTAC code: 418201
Past rank cut-off: 77
Past OP cut-off: 12
OP Guarantee: Yes
Assumed knowledge: English (4, SA), Maths B (4, SA) and Chemistry (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. CHEMISTRY: QUT unit Introductory Chemistry as a visiting student or QUT Continuing Professional Chemistry Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 300
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Mr Robert Dow
Campus: Gardens Point

Career Opportunities

This course can provide a range of exciting opportunities in the field of medical science.

The degree is the preferred qualification for employment in the pathology industry as a scientist. Scientists in the pathology industry perform tests on human blood or tissue and other forms of testing in the areas of immunology, haematology, microbiology, histopathology, cytology and biochemistry. You may decide to specialise in areas such as leukaemia diagnosis, cytogenetics, stem cell manipulation, tumour diagnosis, cytological diagnosis, DNA testing or forensic testing, or proceed to a managerial position within a pathology laboratory or hospital.

The course also provides a first degree for students wishing to undertake postgraduate studies in medicine. Graduates also have the opportunity to proceed to postgraduate studies leading to a career in medical research. Graduates are currently working as researchers in areas such as malaria, virology, stem cells, immunology and molecular biology.

Special Course Requirements

1. **Work Experience Program:** Students are required to undertake a minimum six-week work experience program in a practising pathology laboratory. This takes place at the end of the second year in the full-time program and in a suitable vacation period during the part-time program. Proof of successful vaccination against Hepatitis B must be provided by students at the end of first semester of year two of the program.

2. **Blue Card**: A current Blue Card authorised with QUT is required prior to commencing the clinical placement components in this course. Please read the Blue Card information (http://bluecard.qut.com) and ensure that you allow adequate time for processing your application and issuing of the card in order to avoid clinical experience delays.

Professional Recognition

Graduates are immediately eligible for graduate membership of the Australian Institute of Medical Scientists and will have completed the academic requirements for admission as Members.

Why Choose this Course?

This is the only medical science degree in southern Queensland which is accredited with the Australian Institute of Medical Scientists (AIMS). In recent years more than 90 per cent of graduates seeking employment were successful within four months of graduation.

The course is designed in consultation with senior staff in pathology laboratories, so you'll gain advanced knowledge of new diagnostic techniques used in the workplace. QUT has state-of-the-art laboratories, allowing you to graduate with extensive experience using equipment found in industry. Medical Science students also undertake clinical placements in pathology laboratories during the course giving you a chance to use your skills in a real workplace.

Contact Details

Course Coordinator
Mr Robert Dow
Phone: +61 7 3138 2559
Email: r.dow@qut.edu.au

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, portfolios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Course structure - Full-time

Year 1, Semester 1	
MAB141	Mathematics and Statistics for Medical Science
PCB150	Physics 1H
SCB112	Cellular Basis of Life

SCB113	Chemistry for Health and Medical Science

Year 1, Semester 2

LSB250	Human Physiology
LSB255	Human Anatomy
SCB122	Cell and Molecular Biology
SCB131	Experimental Chemistry

Year 2, Semester 1

LQB383	Molecular and Cellular Regulation
LQB386	Microbial Structure and Function
LSB325	Biochemistry
LSB365	Pathology

Year 2, Semester 2

LSB425	Quantitative Medical Science
LSB435	Diagnostic Microbiology 1
LSB438	Immunology 1
LSB465	Histopathology 1

Year 2, Summer Semester

LSB480	Professional Practice

Year 3, Semester 1

LSB525	Clinical Biochemistry 1
LSB535	Microbial Immunology
LSB555	Haematology 1
LSB565	Histopathology 2

Year 3, Semester 2

LSB625	Clinical Biochemistry 2
LSB635	Diagnostic Microbiology 2
LSB655	Haematology 2
LSB665	Immunohaematology

Course structure - Part-time

Year 1, Semester 1

SCB112	Cellular Basis of Life
SCB113	Chemistry for Health and Medical Science

Year 1, Semester 2

SCB122	Cell and Molecular Biology
SCB131	Experimental Chemistry

Year 2, Semester 1

MAB141	Mathematics and Statistics for Medical Science
PCB150	Physics 1H

Year 2, Semester 2

LSB250	Human Physiology
LSB255	Human Anatomy

Year 3, Semester 1

LQB386	Microbial Structure and Function
LSB365	Pathology

Year 3, Semester 2

LSB435	Diagnostic Microbiology 1
LSB438	Immunology 1

Year 4, Semester 1

LQB383	Molecular and Cellular Regulation
LSB325	Biochemistry

Year 4, Semester 2

LSB425	Quantitative Medical Science
LSB465	Histopathology 1

Year 5, Semester 1

LSB525	Clinical Biochemistry 1
LSB535	Microbial Immunology

Year 5, Semester 2

LSB625	Clinical Biochemistry 2
LSB635	Diagnostic Microbiology 2

Year 5, Summer Semester

LSB480	Professional Practice

Year 6, Semester 1

LSB555	Haematology 1
LSB565	Histopathology 2

Year 6, Semester 2

LSB655	Haematology 2
LSB665	Immunohaematology

Potential Careers:

Biochemist, Clinical Laboratory Scientist, Medical Scientist, Microbiologist, Operations Manager, Pathology Scientist.

Bachelor of Biotechnology Innovation (LS50)

Year offered: 2009
Admissions: Yes
CRICOS code: 037681J
Course duration (full-time): 4 years
Course duration (part-time): 8 years
Domestic fees (indicative): 2009: CSP $3,840 (indicative) per semester
International Fees (per semester): 2009: $10,750 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February and July
QTAC code: 418311
Past rank cut-off: 77
Past OP cut-off: 12
OP Guarantee: Yes
Assumed knowledge: English (4, SA), Maths B (4, SA) and Chemistry (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. CHEMISTRY: QUT unit Introductory Chemistry as a visiting student or QUT Continuing Professional Chemistry Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 384
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Associate Professor Chris Collet
Campus: Gardens Point

Career Opportunities

The Bachelor of Biotechnology Innovation is training the next generation of bioentrepreneurs to translate research outcomes into business opportunities. Graduates can be business-savvy scientists, or operate in the world of commercialisation and technology transfer or start up their own biotechnology-based enterprise bringing their own products to market. The emphasis on innovation and entrepreneurship means that graduates are comfortable working in a start up company environment or on new projects in established enterprises. Traditional roles in research-focussed organisations are also available.

Graduates are taking up key positions in the biotechnology industry sector as scientists, business development officers building new businesses from emerging technologies and as commercialisation officers evaluating and financing the commercialisation of new biotechnology products.

Biotechnology is a global industry with many countries promoting the sector as a major pillar of future economic development. Career opportunities exist internationally and graduates are encouraged to think beyond Australia.

Recommended Study

Biological Science is recommended.

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, students are immediately eligible for graduate membership of AusBiotech Ltd and the Australian Society for Biochemistry and Molecular Biology.

Why Choose this Course?

If you'd like to work in the dynamic world of translating science discoveries into money-making enterprises, meeting people, evaluating projects, picking winners and running with them, then this course is for you!

While research innovation is critical to the future of Australian industry, and that of many other nations, it is the commercialisation of innovations that will realise any potential and serve to build and strengthen local biotechnology industry. Australia already produces many competent and highly regarded scientists but has a poor history and capitalising on research outcomes. The Federal and various State Governments are investing hundreds of millions of dollars in research innovation and commercialisation and the emphasis has moved to bringing emerging technologies into the marketplace. There is an increasing demand for skilled professionals who can drive research commercialisation in the science and technology sector in Australia and in the global marketplace. The Bachelor of Biotechnology Innovation has created a new rapid pathway into the high-flying world of commercialisation and technology transfer.

Graduates of the Bachelor of Biotechnology Innovation have realised outstanding job outcomes and continue to be quickly employed by industry, often successfully competing against graduates with PhDs.

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Course structure - Full-time

Year 1 - Semester 1	
BSB115	Management
MAB101	Statistical Data Analysis 1
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
BSB126	Marketing
LSB250	Human Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology

Year 2, Semester 1	
AMB240	Marketing Planning and Management
LQB383	Molecular and Cellular Regulation
LQB386	Microbial Structure and Function
LSB325	Biochemistry

Year 2, Semester 2	
LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics
LQB489	Plant Physiology and Cell Biology
MGB223	Entrepreneurship and Innovation

Year 3, Semester 1	
LQB582	Biomedical Research Technologies
LQB583	Genetic Research Technologies
LWS007	Introduction To Intellectual Property Law
MGB324	Managing Business Growth

Year 3, Semester 2	
BSB311	Innovation Commercialisation Strategies
LQB682	Protein Biochemistry and Bioengineering

LQB686	Microbial Technology and Immunology
MGB200	Leading Organisations

Year 4, Semester 1	
LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation
LSB709-1	Biotechnology Research Project
MGB225	Intercultural Communication and Negotiation Skills

Year 4, Semester 2	
LSB709-2	Biotechnology Research Project
LSB709-3	Biotechnology Research Project
	Plus any TWO of the following three units:
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions
MGB309	Strategic Management

Course structure - Part-time

Year 1, Semester 1	
MAB101	Statistical Data Analysis 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
LSB258	Principles of Human Physiology
SCB122	Cell and Molecular Biology

Year 2, Semester 1	
BSB115	Management
SCB111	Chemistry 1

Year 2, Semester 2	
BSB126	Marketing
SCB121	Chemistry 2

Year 3, Semester 1	
LQB383	Molecular and Cellular Regulation
LSB325	Biochemistry

Year 3, Semester 2	
LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics

Year 4, Semester 1	
AMB240	Marketing Planning and Management
LQB386	Microbial Structure and Function

Year 4, Semester 2	
LQB489	Plant Physiology and Cell Biology
MGB223	Entrepreneurship and Innovation

Year 5, Semester 1	
LQB582	Biomedical Research Technologies

MGB324   Managing Business Growth

Year 5, Semester 2

BSB311   Innovation Commercialisation Strategies

LQB682   Protein Biochemistry and Bioengineering

Year 6, Semester 1

LQB583   Genetic Research Technologies

LWS007   Introduction To Intellectual Property Law

Year 6, Semester 2

LQB686   Microbial Technology and Immunology

MGB200   Leading Organisations

Year 7, Semester 1

LQB584   Medical Cell Biology

LQB585   Plant Genetic Manipulation

Year 7, Semester 2

Select TWO units from the following:

LQB684   Medical Biotechnology

LQB685   Plant Microbe Interactions

MGB309   Strategic Management

Year 8, Semester 1

LSB709-1   Biotechnology Research Project

MGB225   Intercultural Communication and Negotiation Skills

Year 8, Semester 2

LSB709-2   Biotechnology Research Project

LSB709-3   Biotechnology Research Project

Potential Careers:

Biotechnologist, Biotechnology Business/Investment Analyst, Business Development Officer, Cell Biologist, Commercialisation Officer, Medical Biotechnologist, Molecular Biologist, Plant Biotechnologist, Technology Transfer Officer.

Graduate Certificate in Biotechnology (LS66)

Year offered: 2009
Admissions: Yes
CRICOS code: 054278A
Course duration (full-time): 1 semester (0.5 year)
Course duration (part-time): 2 semesters (1 year)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
International Fees (per semester): 2009: $10,750 (indicative) per semester *(subject to annual review)*
Domestic Entry: July (Note: Students commencing in July, enrol in Semester 2 units first) (Students are NOT able to commence LS66 in February)
International Entry: July (Students are NOT able to commence LS66 in February)
Total credit points: 48
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Mark O'Brien
Campus: Gardens Point

Entry Requirements

A bachelor degree or equivalent, preferably but not necessarily in science, is advised. Please contact the course coordinator for further information on the entry requirements for this course.

Career Outcomes

Career opportunities include employment as research and support staff in the biotechnology industry - private or public biotechnology companies, universities, CSIRO, research institutes, government departments, pathology laboratories and hospitals.

Professional Recognition

Graduates are eligible to join the AusBiotech, the Australian Society for Biochemistry and Molecular Biology, and the Australian Society for Microbiology.

Course Design

LS66 Graduate Certificate in Biotechnology is a foundation program for those people without a science degree or for those who do not have a recent background in the biomolecular sciences. Fundamental aspects of cell and molecular biology, biochemistry and microbiology are covered in this first program which comprises 48 credit points of assessed coursework. Successful completion of this program allows students to then specialise in more advanced aspects of biotechnology. The Graduate Certificate in Biotechnology also allows students to gain essential generic skills and attributes for successful postgraduate research and learning. Students must commence in July and enrol in Semester 2 units first. Advanced standing may be given for this foundation program if the student has a bachelor degree or equivalent with a recent and appropriate undergraduate-level knowledge and practical experience in the key areas of molecular biology, cell biology, biochemistry and/or microbiology at an advanced level. If advanced standing is granted, students can enrol directly in any of the more advanced biotechnology programs (LS76, LS86 or LS96) in their first semester.

Overview

LS66 Graduate Certificate in Biotechnology is the first of four nested postgraduate coursework programs in biotechnology offered by the School of Life Sciences. This particular course will suit anyone who has a recent undergraduate degree (preferably, but not necessarily in science) and who wishes to gain training in general biotechnology. LS66 Graduate Certificate in Biotechnology, a 6-month full-time foundation program, provides those students without a sound background in the biomolecular sciences the opportunity for direct entry into more advanced biotechnology streams. Science-based biomolecular science units emphasise both theoretical and laboratory skills and cover contemporary fundamental techniques underpinning the science of biotechnology.

Contact Details

Course Coordinator

Dr Mark O'Brien
Phone: +61 7 3138 2568
Email: m.obrien@qut.edu.au

Course structure - Full-time

Year 1, Semester 2 (MODULE 1)	
LSN101	Molecular Biosciences
LSN102	Cellular Biosciences
LSN103	Postgraduate Learning and Research Skills
LQB483	Molecular Biology Techniques

Course structure - Part-time

Year 1, Semester 2 (MODULE 1)	
LSN101	Molecular Biosciences
LSN102	Cellular Biosciences

Year 2, Semester 2 (MODULE 1)	
LSN103	Postgraduate Learning and Research Skills
LQB483	Molecular Biology Techniques

Potential Careers:

Biochemist, Biotechnologist, Medical Biotechnologist, Microbiologist, Molecular Biologist, Plant Biotechnologist, Research Assistant, Scientist, Virologist.

Graduate Diploma in Biotechnology (LS76)

Year offered: 2009
Admissions: Yes
CRICOS code: 016975B
Course duration (full-time): 2 semesters (1 year)
Course duration (part-time): 4 semesters (2 years)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: July (Note: Students commencing in July, enrol in Semester 2 units first) *Also see "ENTRY REQUIREMENTS" below
International Entry: July (Note: Students commencing in July, enrol in Semester 2 units first) *Also see "ENTRY REQUIREMENTS" below
Total credit points: 96
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Mark O'Brien
Campus: Gardens Point

Entry Requirements

A bachelor degree or equivalent, preferably but not necessarily in science, is required. Please contact the course coordinator for further information on the entry requirements for this course.

*LS76 commences in July (Module 1 entry). Students with advanced standing for Module 1 should commence in February as the Faculty does not offer sufficient units in Module 2 in second semester. Note especially that the February entry point for this course is for students with advanced standing for Module 1. It is not possible to commence Module 1 in February.

For students with advanced standing for Module 1 and who wish to enter LS76 in July, a modified program will be required and this should be discussed with the course coordinator prior to enrolment. Students should note that this may require them to study business electives only in their first semester and could lead to them having to take an additional semester to complete the requirements of their program.

Professional Recognition

Graduates are eligible to join the AusBiotech, the Australian Society for Biochemistry and Molecular Biology, and the Australian Society for Microbiology.

Career Outcomes

Career opportunities include employment as research and support staff in the biotechnology industry - private or public biotechnology companies, universities, CSIRO, research institutes, government departments, pathology laboratories and hospitals.

Course Design

The program of study for an individual student will be decided in consultation with the course coordinator and will take into account the student's background in the biomolecular sciences and area of interest in biotechnology. The LS76 Graduate Diploma in Biotechnology builds upon concepts covered in the foundation program, LS66 Graduate Certificate in Biotechnology. The Graduate Diploma in Biotechnology not only offers students opportunities to pursue study in several relevant focus areas including the theoretical and practical aspects of biotechnology, but also the business of biotechnology, marketing, commercialisation, as well as the legal and ethical aspects of biotechnological applications. The Graduate Diploma in Biotechnology is comprised of 96 credit points of assessed coursework. Advanced standing may be given for the suite of units offered in the foundation program, LS66 Graduate Certificate in Biotechnology, if the student has a bachelor degree or equivalent with a recent and appropriate undergraduate-level knowledge and practical experience in the key areas of molecular biology, cell biology, biochemistry and/or microbiology at an advanced level. If advanced standing is granted, students can enrol directly in LS76 in their first semester.

Overview

LS76 Graduate Diploma in Biotechnology is one of four nested postgraduate coursework programs in biotechnology offered by the School of Life Sciences. The Graduate Diploma in Biotechnology will suit anyone who has a recent undergraduate degree (preferably, but not necessarily in science) and who wishes to gain training and advanced specialisation in general, medical and/or plant biotechnology. The program also caters for working scientists, support staff, or students involved in commercial aspects of biotechnology, who wish to update their theoretical and practical biotechnology skills for a current or future position. Science-based biotechnology units emphasise laboratory skills and hands-on laboratory experimentation feature prominently in the program, which covers contemporary techniques in biotechnology. New technology is incorporated as it becomes available. The program also offers students opportunities to pursue studies related to the business of biotechnology, marketing, commercialisation, as well as the legal and ethical aspects of biotechnological applications. LS76 Graduate Diploma in Biotechnology, a one year full-time program, builds upon the knowledge and skills base developed in the Graduate Certificate in Biotechnology and allows the student to stream into either medical or plant biotechnology or both.

Contact Details

Course Coordinator
Dr Mark O'Brien
Phone: +61 7 3138 2568
Email: m.obrien@qut.edu.au

Course structure - Full-time

Year 1, Semester 2 (MODULE 1)	
LSN101	Molecular Biosciences
LSN102	Cellular Biosciences
LSN103	Postgraduate Learning and Research Skills
LQB483	Molecular Biology Techniques

Year 2, Semester 1 (MODULE 2)	
LSP127	Business Aspects of Biotechnology
	Either
LSB509	Medical Biotechnology 1
	Or
LSB577	Plant Biotechnology 1
	null
	In consultation with the course coordinator, choose 24 credit points from the following units:
LSB509	Medical Biotechnology 1
LSB527	Biomedical Research Technologies
LSB577	Plant Biotechnology 1
GSN408	Fundamentals of Marketing Management
HHB270	Gene Technology And Ethics
IBN408	Global Business Operations
LWN135	Law, Justice and New Genetic Technologies

Course structure - Part-time

Year 1, Semester 2 (MODULE 1)	
LSN101	Molecular Biosciences
LSN102	Cellular Biosciences

Year 2, Semester 2 (MODULE 1)	
LSN103	Postgraduate Learning and Research Skills
LQB483	Molecular Biology Techniques

Year 3, Semester 1 (MODULE 2)	
LSP127	Business Aspects of Biotechnology
	Either
LSB509	Medical Biotechnology 1
	Or
LSB577	Plant Biotechnology 1

Year 3, Semester 2 (MODULE 2)	
	In consultation with the course coordinator, choose 24 credit points from the following units
LSB605	Protein Engineering and Bioprocessing
LSB607	Protein Purification
LSB608	Protein Science
LSN103	Postgraduate Learning and Research Skills
MGN409	Introduction to Management

Potential Careers:

Biochemist, Biotechnologist, Medical Biotechnologist, Microbiologist, Molecular Biologist, Plant Biotechnologist, Research Assistant, Scientist, Virologist.

Master of Biotechnology (LS86)

Year offered: 2009
Admissions: Yes
CRICOS code: 018479B
Course duration (full-time): 3 semesters (1.5 years)
Course duration (part-time): 6 semesters (3 years)
Domestic fees (indicative): 2009: Full fee tuition $7,250 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: July (Note: Students commencing in July, enrol in Semester 2 units first) *Also see "ENTRY REQUIREMENTS" below
International Entry: July (Note: Students commencing in July, enrol in Semester 2 units first) *Also see "ENTRY REQUIREMENTS" below
Total credit points: 144
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Mark O'Brien
Campus: Gardens Point

Entry Requirements

A bachelor degree or equivalent, preferably but not necessarily in science, is required. Please contact the course coordinator for further information on the entry requirements for this course.

*LS86 commences in July (Module 1 entry). Students with advanced standing for Module 1 should commence in February as the Faculty does not offer sufficient units in Module 2 in second semester. Note especially that the February entry point for this course is for students with advanced standing for Module 1. It is not possible to commence Module 1 in February.

For students with advanced standing for Module 1 and who wish to enter LS86 in July, a modified program will be required and this should be discussed with the course coordinator prior to enrolment. Students should note that this may require them to study business electives only in their first semester and could lead to them having to take an additional semester to complete the requirements of their program.

Career Outcomes

Career opportunities include employment as research and support staff in the biotechnology industry - private or public biotechnology companies, universities, CSIRO, research institutes, government departments, pathology laboratories and hospitals.

Professional Recognition

Graduates are eligible to join the AusBiotech, the Australian Society for Biochemistry and Molecular Biology, and the Australian Society for Microbiology.

Course Design

The program of study for an individual student will be decided in consultation with the course coordinator and will take into account the student's background in the biomolecular sciences and area of interest in biotechnology. The LS86 Master of Biotechnology program follows on from successful completion of core and elective units offered in both LS66 Graduate Certificate in Biotechnology and LS76 Graduate Diploma in Biotechnology. The program not only offers students opportunities to pursue study in several relevant focus areas including the theoretical and practical aspects of biotechnology, but also the business of biotechnology, marketing, commercialisation, as well as the legal and ethical aspects of biotechnological applications. LS86 Master of Biotechnology is comprised of 144 credit points of assessed coursework and is designed to give students further training and specialisation in general, medical and/or plant biotechnology. Advanced standing may be given for the suite of units offered in the foundation program, LS66 Graduate Certificate in Biotechnology, if the student has a bachelor degree or equivalent with a recent and appropriate undergraduate-level knowledge and practical experience in the key areas of molecular biology, cell biology, biochemistry and/or microbiology at an advanced level. If advanced standing is granted, students can enrol directly in LS86 in their first semester.

Overview

LS86 Master of Biotechnology is one of four nested postgraduate coursework programs in biotechnology offered by the School of Life Sciences. LS86 Master of Biotechnology extends the LS76 Graduate Diploma in Biotechnology program by providing additional training and specialisation in either medical or plant biotechnology or both. The program can be completed in 1.5 years full-time. The Master of Biotechnology program will suit anyone who has a recent undergraduate degree (preferably, but not necessarily in science) and who wishes to gain training and advanced specialisation in general, medical and/or plant biotechnology. The program also caters for working scientists, support staff, or students involved in commercial aspects of biotechnology, who wish to update their theoretical and practical biotechnology skills for a current or future position. Science-based biotechnology units emphasise laboratory skills and hands-on laboratory experimentation feature prominently in the program, which covers contemporary techniques in biotechnology. New technology is incorporated as it becomes available. The program also offers students opportunities to pursue studies related to the business of biotechnology, marketing, commercialisation, as well as the legal and ethical aspects of biotechnological applications.

Contact Details

Coordinator
Dr Mark O'Brien
Phone: +61 7 3138 2568
Email: m.obrien@qut.edu.au

Course structure - Full-time

Year 1, Semester 2 (MODULE 1)	
LSN101	Molecular Biosciences
LSN102	Cellular Biosciences
LSN103	Postgraduate Learning and Research Skills

LQB483	Molecular Biology Techniques

LSP127	Business Aspects of Biotechnology
	Either
LSB509	Medical Biotechnology 1
	Or
LSB577	Plant Biotechnology 1
	null
	In consultation with the course coordinator, choose 24 credit points from the following units:
LSB509	Medical Biotechnology 1
LSB527	Biomedical Research Technologies
LSB577	Plant Biotechnology 1
GSN408	Fundamentals of Marketing Management
HHB270	Gene Technology And Ethics
IBN408	Global Business Operations
LWN135	Law, Justice and New Genetic Technologies

Year 2, Semester 2 (MODULE 3)

BSB311	Innovation Commercialisation Strategies
	Either
LSB609	Medical Biotechnology 2
	Or
LSB677	Plant Biotechnology 2
	null
	In consultation with the course coordinator, choose 24 credit points from the following units:
LQB484	Introduction to Genomics and Bioinformatics
LSB605	Protein Engineering and Bioprocessing
LSB607	Protein Purification
LSB608	Protein Science
LSB609	Medical Biotechnology 2
LSB677	Plant Biotechnology 2
GSN418	Marketing Strategy Development
MGN409	Introduction to Management

Course structure - Part-time

Year 1, Semester 2 (MODULE 1)

LSN101	Molecular Biosciences
LSN102	Cellular Biosciences

Year 2, Semester 2 (MODULE 1)

LSN103	Postgraduate Learning and Research Skills
LQB483	Molecular Biology Techniques

Year 3, Semester 1 (MODULE 2)

LSP127	Business Aspects of Biotechnology
	Either

LSB509	Medical Biotechnology 1
	Or
LSB577	Plant Biotechnology 1

Year 3, Semester 2 (MODULE 3)

	In consultation with the course coordinator, choose 24 credit points from the following units:
LSB605	Protein Engineering and Bioprocessing
LSB607	Protein Purification
LSB608	Protein Science
LSN103	Postgraduate Learning and Research Skills
MGN409	Introduction to Management

Year 4, Semester 1 (MODULE 2)

	In consultation with the course coordinator, choose 24 credit points from the following units:
LSB509	Medical Biotechnology 1
LSB527	Biomedical Research Technologies
LSB577	Plant Biotechnology 1
GSN408	Fundamentals of Marketing Management
HHB270	Gene Technology And Ethics
IBN408	Global Business Operations
LWN135	Law, Justice and New Genetic Technologies

Year 4, Semester 2 (MODULE 3)

BSB311	Innovation Commercialisation Strategies
	Either
LSB609	Medical Biotechnology 2
	Or
LSB677	Plant Biotechnology 2

Potential Careers:

Biochemist, Biotechnologist, Medical Biotechnologist, Microbiologist, Molecular Biologist, Plant Biotechnologist, Research Assistant, Scientist, Virologist.

Master of Biotechnology (Advanced) (LS96)

Year offered: 2009
Admissions: Yes
CRICOS code: 054279M
Course duration (full-time): 4 semesters (2 years)
Course duration (part-time): 8 semesters (4 years)
Domestic fees (indicative): 2009: Full fee tuition $7,500 (indicative) per semester
International Fees (per semester): 2009: $10,750 (indicative) per semester *(subject to annual review)*
Domestic Entry: July (Note: Students commencing in July, enrol in Semester 2 units first) *Also see "ENTRY REQUIREMENTS" below
International Entry: July (Note: Students commencing in July, enrol in Semester 2 units first) *Also see "ENTRY REQUIREMENTS" below
Total credit points: 192
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Mark O'Brien
Campus: Gardens Point

Entry Requirements

A bachelor degree or equivalent, preferably but not necessarily in science, is required. Please contact the course coordinator for further information on the entry requirements for this course.

*LS96 commences in July (Module 1 entry). Students with advanced standing for Module 1 should commence in February as the Faculty does not offer sufficient units in Module 2 in second semester. Note especially that the February entry point for this course is for students with advanced standing for Module 1. It is not possible to commence Module 1 in February.

For students with advanced standing for Module 1 and who wish to enter LS96 in July, a modified program will be required and this should be discussed with the course coordinator prior to enrolment. Students should note that this may require them to study business electives only in their first semester and could lead to them having to take an additional semester to complete the requirements of their program. Also, students may not be able to undertake the project component of LS96.

Career Outcomes

Career opportunities include employment as research and support staff in the biotechnology industry - private or public biotechnology companies, universities, CSIRO, research institutes, government departments, pathology laboratories and hospitals.

Professional Recognition

Graduates are eligible to join the AusBiotech, the Australian Society for Biochemistry and Molecular Biology, and the Australian Society for Microbiology.

Course Design

The program of study for an individual student will be decided in consultation with the course coordinator and will take into account the student's background in the biomolecular sciences and area of interest in biotechnology. LS96 Master of Biotechnology (Advanced) completes the comprehensive training of students and follows successful completion of core and elective units offered in LS66, LS76 and LS86. It is comprised of 192 credit points of assessed coursework in general, medical and/or plant biotechnology. In their final semester of the program, students may undertake a supervised research project either at QUT or in the workplace. Students must discuss research project areas prior to enrolment in this course to select both a suitable project and a project supervisor(s) prior to entry (or as soon as possible thereafter). While the School of Life Sciences has a wide range of research project areas available, it may not always be possible for students to conduct a research project exactly in the area they desire. Part-time students may also elect to do a research project at their place of work, with both a workplace supervisor and a QUT supervisor. Alternative options are available. For students not undertaking a research project, additional coursework must be completed. Students will need to consult with the course coordinator in selecting additional coursework units. The LS96 Master of Biotechnology (Advanced) program not only offers students opportunities to pursue study in several relevant focus areas including the theoretical and practical aspects of biotechnology, but also the business of biotechnology, marketing, commercialisation, as well as the legal and ethical aspects of biotechnological applications. Advanced standing may be given for the suite of units offered in the foundation program, LS66 Graduate Certificate in Biotechnology, if the student has a bachelor degree or equivalent with a recent and appropriate undergraduate-level knowledge and practical experience in the key areas of molecular biology, cell biology, biochemistry and/or microbiology at an advanced level. If advanced standing is granted, students can enrol directly in LS96 in their first semester.

Overview

LS96 Master of Biotechnology (Advanced) is one of four nested postgraduate coursework programs in biotechnology offered by the School of Life Sciences. The LS96 Master of Biotechnology (Advanced) program offers students a complete and comprehensive training in biotechnology by extending the suite of units offered within the LS86 Master of Biotechnology program or by giving students the opportunity in their final semester of study to pursue a research project. The Master of Biotechnology (Advanced) is a two year full-time program of study commencing with the foundation suite of core units, where appropriate. The LS96 Master of Biotechnology (Advanced) program will suit anyone who has a recent undergraduate degree (preferably, but not necessarily in science) and who wishes to gain training and advanced specialisation in general, medical and/or plant biotechnology. The program also caters for working scientists, support staff, or students involved in commercial aspects of biotechnology, who wish to update their theoretical and practical biotechnology skills for a current or future position. Science-based biotechnology units emphasise laboratory skills and hands-on laboratory

experimentation feature prominently in the program, which covers contemporary techniques in biotechnology. New technology is incorporated as it becomes available. The program also offers students opportunities to pursue studies related to the business of biotechnology, marketing, commercialisation, as well as the legal and ethical aspects of biotechnological applications.

Contact Details
Course Coordinator
Dr Mark O'Brien
Phone: +61 7 3138 2568
Email: m.obrien@qut.edu.au

Course structure - Full-time

Year 1, Semester 2 (MODULE 1)
LSN101	Molecular Biosciences
LSN102	Cellular Biosciences
LSN103	Postgraduate Learning and Research Skills
LQB483	Molecular Biology Techniques

Year 2, Semester 1 (MODULE 2)
LSP127	Business Aspects of Biotechnology
	Either
LSB509	Medical Biotechnology 1
	Or
LSB577	Plant Biotechnology 1
	null
	In consultation with the course coordinator, choose 24 credit points from the following units:
LSB509	Medical Biotechnology 1
LSB527	Biomedical Research Technologies
LSB577	Plant Biotechnology 1
GSN408	Fundamentals of Marketing Management
HHB270	Gene Technology And Ethics
IBN408	Global Business Operations
LWN135	Law, Justice and New Genetic Technologies

Year 2, Semester 2 (MODULE 3)
BSB311	Innovation Commercialisation Strategies
	Either
LSB609	Medical Biotechnology 2
	Or
LSB677	Plant Biotechnology 2
	null
	In consultation with the course coordinator, choose 24 credit points from the following units:
LQB484	Introduction to Genomics and Bioinformatics
LSB605	Protein Engineering and Bioprocessing
LSB607	Protein Purification
LSB608	Protein Science
LSB609	Medical Biotechnology 2
LSB677	Plant Biotechnology 2
GSN418	Marketing Strategy Development
MGN409	Introduction to Management

Year 3, Semester 1 (MODULE 4)
LSN710	Project
	null
	For those students NOT undertaking LSN710 Project, in consultation with the course coordinator, choose 48 credit points from the following units:
LSB509	Medical Biotechnology 1
LSB527	Biomedical Research Technologies
LSB577	Plant Biotechnology 1
GSN408	Fundamentals of Marketing Management
HHB270	Gene Technology And Ethics
IBN408	Global Business Operations
LWN135	Law, Justice and New Genetic Technologies

Course structure - Part-time

Year 1, Semester 2 (MODULE 1)
LSN101	Molecular Biosciences
LSN102	Cellular Biosciences

Year 2, Semester 2 (MODULE 1)
LSN103	Postgraduate Learning and Research Skills
LQB483	Molecular Biology Techniques

Year 3, Semester 1 (MODULE 2)
LSP127	Business Aspects of Biotechnology
	Either
LSB509	Medical Biotechnology 1
	Or
LSB577	Plant Biotechnology 1

Year 3, Semester 2 (MODULE 3)
	In consultation with the course coordinator, choose 24 credit points from the following units:
LSB605	Protein Engineering and Bioprocessing
LSB607	Protein Purification
LSB608	Protein Science
LSN103	Postgraduate Learning and Research Skills
MGN409	Introduction to Management

Year 4, Semester 1 (MODULE 2)
	In consultation with the course coordinator, choose 24 credit points from the following units:
LSB509	Medical Biotechnology 1

LSB527	Biomedical Research Technologies
LSB577	Plant Biotechnology 1
GSN408	Fundamentals of Marketing Management
HHB270	Gene Technology And Ethics
IBN408	Global Business Operations
LWN135	Law, Justice and New Genetic Technologies

Year 4, Semester 2 (MODULE 3)

BSB311	Innovation Commercialisation Strategies
	Either
LSB609	Medical Biotechnology 2
	Or
LSB677	Plant Biotechnology 2

Year 5, Semester 1 (MODULE 4)

LSN711	Project 1
	For those students NOT undertaking LSN712 Project 2, in consultation with the course coordinator, choose 48 credit points from the following units:
LSB509	Medical Biotechnology 1
LSB527	Biomedical Research Technologies
LSB577	Plant Biotechnology 1
GSN408	Fundamentals of Marketing Management
HHB270	Gene Technology And Ethics
IBN408	Global Business Operations
LWN135	Law, Justice and New Genetic Technologies

Year 5, Semester 2 (MODULE 4)

LSN712	Project 2
	For those students NOT undertaking LSN711 Project 1, in consultation with the course coordinator, choose 24 credit points from the following units:
LQB484	Introduction to Genomics and Bioinformatics
LSB605	Protein Engineering and Bioprocessing
LSB607	Protein Purification
LSB608	Protein Science
LSB609	Medical Biotechnology 2
LSB677	Plant Biotechnology 2
GSN408	Fundamentals of Marketing Management
GSN418	Marketing Strategy Development
MGN409	Introduction to Management

Potential Careers:

Biochemist, Biotechnologist, Medical Biotechnologist, Microbiologist, Molecular Biologist, Plant Biotechnologist, Research Assistant, Scientist, Virologist.

Bachelor of Mathematics (MA54)

Year offered: 2009
Admissions: Yes
CRICOS code: 049433D
Course duration (full-time): 3 Years
Course duration (part-time): 6 Years
Domestic fees (indicative): 2009: CSP $3,694 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February and July
QTAC code: 418701
Past rank cut-off: 77
Past OP cut-off: 12
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 288
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Glenn Fulford
Discipline coordinator: Dr Dann Mallet - Assistant Course Coordinator
Campus: Gardens Point

Career Opportunities

Mathematics graduates are employed across a wide range of areas. These include, but are not limited to, finance, investment, information technology, environmental management, health, marketing, logistics, defence, media, education and research. In addition to their knowledge and skills in mathematics, graduates are also highly valued for their analytical and problem-solving skills. Development of skills in communication, problem-solving, critical thinking and teamwork form an integral part of the course.

Favourable career outcomes for Bachelor of Mathematics graduates are likely due to the current demand for qualified statisticians and mathematicians.

Recommended Study

Maths C is recommended.

Course Design

The course structure is flexible in nature so that you can choose to study only mathematics units or include some units from another area of interest, such as science, business or information technology.

In the first year 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.

You will be able to design your program to suit your interests and career aspirations by combining advanced units from a number of the following areas of specialisation:

Applied Mathematics
Mathematical techniques that can be used to solve real-world problems.

Computational Mathematics
Computers and numerical techniques used to find solutions to complex problems which cannot be solved analytically.

Discrete Mathematics
The mathematics of numbers, including study of sets, fields, ring and groups.

Financial Mathematics
A wide variety of mathematical techniques used in applications within the financial area.

Mathematical Modelling
The utilisation of 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
Supercomputing, 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.

Professional Recognition

Membership of the Australian Mathematical Society, the Statistical Society of Australia Inc and the Australian Society for Operations Research is available.

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

Contact Details

Course Coordinator
Dr Glenn Fulford
Phone: +61 7 3138 5196
Email: g.fulford@qut.edu.au

Assistant Course Coordinator
Dr Dann Mallet
Phone: +61 7 3138 2354

Email: dg.mallet@qut.edu.au

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Course structure - Bachelor of Mathematics

Students complete at least 192 credit points (16 twelve credit point units) of Mathematics units according to the following requirements:

Level 1 Mathematics Units

Students must complete the following Level 1 Mathematics units:

MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB220	Computational Mathematics 1

Note: MAB100 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

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

Up to a maximum of 96 credit points may be taken as electives with not more than 48 credit points from first level units.

Note: A first level unit is classified as a unit that is normally taken in the first year of a single degree. Examples of first level units are BSB1xx, INB101-INB104, SCB1xx units, PQB2xx units. Please check with your Course Coordinator if you would like to take language units or units from faculties other than Business, Information Technology or Science so that you can be advised on the correct unit(s) in which to enrol.

Suggested Program for February Entry

STUDENTS WITH AN EXIT ASSESSMENT OF AT LEAST SOUND ACHIEVEMENT IN BOTH SENIOR MATHEMATICS B AND SENIOR MATHEMATICS C (OR EQUIVALENT)

Year 1, Semester 1

MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
	ONE additional unit from:
BSB110	Accounting
MAB220	Computational Mathematics 1
SCB110	Science Concepts and Global Systems
	Other first level unit (see below and later in document for other suggestions)

Year 1, Semester 2

MAB210	Statistical Modelling 1
	THREE additional units from:
MAB220	Computational Mathematics 1
MAB281	Mathematics for Computer Graphics
MAB313	Mathematics of Finance
MAB422	Mathematical Modelling
MAB480	Introduction to Scientific Computation
BSB113	Economics
PQB250	Mechanics and Electromagnetism
PQB251	Waves and Optics
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Other first level elective units (see later in document for other suggestions)

Year 2, Semester 1

MAB311	Advanced Calculus
MAB312	Linear Algebra
	TWO additional units from mathematics units or elective units

Year 2, Semester 2

FOUR units from mathematics units or elective units (see course structure)

Year 3, Semester 1

FOUR units from mathematics units or elective units (see course structure)

Year 3, Semester 2

FOUR units from mathematics units or elective units (see course structure)

STUDENTS WITH AN EXIT ASSESSMENT OF AT LEAST SOUND ACHIEVEMENT IN SENIOR MATHEMATICS B ONLY (OR

EQUIVALENT)

Year 1, Semester 1

MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
	TWO additional units from:
BSB110	Accounting
BSB113	Economics
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Other first level elective unit (see later in document for other suggestions)

Year 1, Semester 2

MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB220	Computational Mathematics 1

Year 2, Semester 1

MAB311	Advanced Calculus
MAB312	Linear Algebra
	TWO additional units from mathematics units or elective units

Year 2, Semester 2

| | FOUR units from mathematics units or elective units (see course structure) |

Year 3, Semester 1

| | FOUR units from mathematics units or elective units (see course structure) |

Year 3, Semester 2

| | FOUR units from mathematics units or elective units (see course structure) |

Mathematics Units

Mathematics Units

Students should not enrol in Mathematics units other than those listed below:

Level 1 Mathematics Units

MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB220	Computational Mathematics 1

Level 2 Mathematics Units

| MAB311 | Advanced Calculus |
| MAB312 | Linear Algebra |

MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2
MAB315	Operations Research 2
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB420	Computational Mathematics 2
MAB422	Mathematical Modelling
MAB461	Discrete Mathematics
MAB480	Introduction to Scientific Computation
MAB481	Visualisation and Data Analysis

Level 3 Mathematics Units

MAB521	Applied Mathematics 3
MAB522	Computational Mathematics 3
MAB524	Statistical Inference
MAB525	Operations Research 3A
MAB533	Statistical Techniques
MAB536	Time Series Analysis
MAB613	Partial Differential Equations
MAB623	Financial Mathematics
MAB624	Applied Statistics 3
MAB625	Operations Research 3B
MAB640	Industry Project
MAB672	Advanced Mathematical Modelling
MAB681	Advanced Visualisation and Data Analysis

Other Units

Up to a maximum of 96 credit points (8 twelve credit point units) can be taken from other units, with not more than 48 credit points (4 twelve credit point units) from first level units. A first level unit is classified as a unit that is normally taken in the first year of a single degree.

OTHER UNIT - FIRST LEVEL: This unit can only be taken in MA54 after recommendation from the Course Coordinator. This unit cannot be included in the minimum of 16 mathematics units required for the course.

| MAB105 | Preparatory Mathematics |

OTHER UNIT - ADVANCED LEVEL: This unit cannot be included in the minimum of 16 mathematics units required for the course, but can be counted as an elective.

| MAB281 | Mathematics for Computer Graphics |

Potential Careers:

Actuary, Computer Game Programmer, Market Research Manager, Mathematician, Quantitative Analyst, Statistician.

Graduate Certificate in Mathematical Science (MA65)

Year offered: 2009
Admissions: Yes
CRICOS code: 046044G
Course duration (full-time): 1 semester (0.5 year)
Course duration (part-time): 2 semesters (1 year)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February, July or Summer Program
International Entry: February and July
Total credit points: 48
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Troy Farrell
Campus: Gardens Point

Entry Requirements

To be eligible to enrol an applicant will normally have completed an undergraduate degree in any discipline. Applicants who do not meet the normal entry requirement may be permitted to enrol subject to the approval of the Head of the School of Mathematical Sciences. Applicants should provide details of their relevant industry experience and prior learning.

Career Outcomes

Knowledge and skills in mathematics and/or statistical techniques are increasingly in demand in many different areas. For example, quantitative analysis in the finance area; statistical and mathematical modelling in natural resources and health management; operations research in transport management. Mathematics teachers are in high demand.

Course Design

The program of study for an individual student will be decided in consultation with the course coordinator and will take into account the student's background and area of interest within the mathematical sciences.

In the Graduate Certificate, at least 36 credit points must be taken from mathematics units and up to 12 credit points can be taken from units other than mathematics units.

Overview

This course enables graduates from any discipline to develop their knowledge and skills in one or more areas of the mathematical sciences. Strands available include mathematical modelling/applied mathematics, computational mathematics, statistics/statistical modelling, quantitative analysis/financial mathematics, operations research and scientific computation and visualisation. It is also suitable for graduates who wish to obtain the mathematics units required for mathematics as a teaching area for secondary schools. It recognises that students may not have studied mathematics for some time.

Contact Details

Course Coordinator
Dr Troy Farrell
Phone: +61 7 3138 2364
Email: sms.coursework@qut.edu.au

Course structure

- At least 36 credit points must be taken from mathematics units.

- Up to 12 credit points can be taken from units other than mathematics units.

- The units recommended will depend upon your mathematics background from secondary school or tertiary studies, length of time since you have studied mathematics, and your areas of interest.

Units available:

Code	Unit
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB220	Computational Mathematics 1
MAB281	Mathematics for Computer Graphics
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2
MAB315	Operations Research 2
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB420	Computational Mathematics 2
MAB422	Mathematical Modelling
MAB461	Discrete Mathematics
MAB480	Introduction to Scientific Computation
MAB481	Visualisation and Data Analysis
MAB521	Applied Mathematics 3
MAB522	Computational Mathematics 3
MAB524	Statistical Inference
MAB525	Operations Research 3A
MAB533	Statistical Techniques
MAB613	Partial Differential Equations
MAB623	Financial Mathematics
MAB625	Operations Research 3B
MAB672	Advanced Mathematical Modelling
MAN200	Mathematical Foundations
MAN201	Mathematics
MAN536	Time Series Analysis

MAN624   Applied Statistics

MAN681   Advanced Visualisation and Data Analysis

MAN700   Project

MAN717   Minor Project

MAN761   Analysis

MAN764   Applied Mathematical Modelling

MAN765   Bayesian Data Analysis

MAN766   Applied Time Series Analysis

MAN768   Advanced Techniques in Operations Research

MAN769   Mathematics of Finance

MAN771   Computational Mathematics 4

MAN774   Perturbation Methods

MAN775   Statistical Modelling of Financial Processes

MAN777   Mathematics of Fluid Flow

MAN778   Applications of Discrete Mathematics

MAN787-1   Project

MAN787-2   Project

MAN787-3   Project

Potential Careers:

Actuary, Mathematician, Quantitative Analyst, Statistician.

Graduate Diploma in Mathematical Science (MA75)

Year offered: 2009
Admissions: Yes
CRICOS code: 046041M
Course duration (full-time): 2 semesters (1 year)
Course duration (part-time): 4 semesters (2 years)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February, July or Summer Program
International Entry: February and July
Total credit points: 96
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Troy Farrell
Campus: Gardens Point

Entry Requirements

To be eligible to enrol an applicant will normally have completed an undergraduate degree in any discipline. Students who do not have sufficient background in introductory calculus may be advised to enrol in MA65 Graduate Certificate in Mathematical Sciences first.

Prior to Enrolment

Potential applicants for this course are advised to contact the Course Coordinator prior to submitting their application to discuss their plans. International students in particular, should be aware that full-time enrolment of at least 36 credit points per semester may not be possible. This is due to the need to meet unit prerequisites. Units are not offered externally although units do have varying amounts of on-line material available. Lectures, tutorials and computer-based practicals may be timetabled during the day or early evening.

Career Outcomes

Knowledge and skills in mathematics and/or statistical techniques are increasingly in demand in many different areas. For example, quantitative analysis in the finance area; statistical and mathematical modelling in natural resources and health management; operations research in transport management.

Course Design

The program of study for an individual student will be decided in consultation with the course coordinator and will take into account the student's background and area of interest within the mathematical sciences.

In the Graduate Diploma, at least 24 credit points must be taken from postgraduate mathematics units other than Mathematical Foundations and/or Mathematics. Up to 24 credit points can be taken from units other than mathematics units and there is a limit of 36 credit points from project units.

Overview

This course enables graduates from any discipline to develop their knowledge and skills in one or more areas of the mathematical sciences. Strands available include mathematical modelling/applied mathematics, computational mathematics, statistics/statistical modelling, quantitative analysis/financial mathematics, operations research and scientific computation and visualisation. It recognises that students may not have studied mathematics for some time.

Contact Details

Course Coordinator

Dr Troy Farrell
Phone: +61 7 3138 2364
Email: sms.coursework@qut.edu.au

Course structure

- At least 24 credit points must be taken from postgraduate mathematics units other than MAN200 Mathematical Foundations and/or MAN201 Mathematics.
- Up to 24 credit points can be taken from units other than mathematics units.
- Limit of 36 credit points from project units.

Your planned program of study should be decided in consultation with the Course Coordinator. It will take into account your background and area of interest within the mathematical sciences. Strands represent areas of the mathematical sciences which may be of interest to you and the units listed under each strand can guide you in developing your planned program. Students will usually select units from one or two strands only. The unit MAN700 Project can be used to satisfy the rule requiring at least 24 credit points from postgraduate mathematics units other than MAN200 and/or MAN201.

The following postgraduate mathematics units are available in all strands (subject to the limit on credit points from project units):

MAN200	Mathematical Foundations
MAN201	Mathematics
MAN700	Project
MAN717	Minor Project
MAN787-1	Project
MAN787-2	Project
MAN787-3	Project

If you wish to take any of the above units you will need to discuss your plans and the proposed content with the Course Coordinator.

Strand Information

The following strand information is to assist you with unit selection. You do not have to enrol in all units listed for a strand. The prerequisite units are given to guide you. Depending on your background, you may have already covered some of the units listed (or equivalent units) in your undergraduate

studies. If you have not studied any mathematics for some time, you may need to undertake one or two units prior to commencing those listed in the strand information.

Mathematical Modelling/Applied Mathematics

Postgraduate Mathematics Units:

MAN761	Analysis
MAN764	Applied Mathematical Modelling
MAN774	Perturbation Methods
MAN777	Mathematics of Fluid Flow

Prerequisite Units:

MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB220	Computational Mathematics 1
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB413	Differential Equations
MAB422	Mathematical Modelling
MAB521	Applied Mathematics 3
MAB613	Partial Differential Equations
MAB672	Advanced Mathematical Modelling

Computational Mathematics

Postgraduate Mathematics Unit:

MAN771	Computational Mathematics 4

Prerequisite Units:

MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB220	Computational Mathematics 1
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB420	Computational Mathematics 2
MAB480	Introduction to Scientific Computation
MAB522	Computational Mathematics 3

Operations Research

Postgraduate Mathematics Units:

MAN768	Advanced Techniques in Operations Research

Prerequisite Units:

MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB315	Operations Research 2
MAB525	Operations Research 3A
MAB625	Operations Research 3B

Statistics/Statistical Modelling

Postgraduate Mathematics Units:

MAN536	Time Series Analysis
MAN624	Applied Statistics
MAN765	Bayesian Data Analysis
MAN766	Applied Time Series Analysis
MAN775	Statistical Modelling of Financial Processes

Prerequisite Units:

MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB314	Statistical Modelling 2
MAB414	Applied Statistics 2
MAB524	Statistical Inference
MAB533	Statistical Techniques

Quantitative Analysis/Financial Mathematics

Postgraduate Mathematics Units:

MAN536	Time Series Analysis
MAN624	Applied Statistics
MAN765	Bayesian Data Analysis
MAN766	Applied Time Series Analysis
MAN769	Mathematics of Finance
MAN775	Statistical Modelling of Financial Processes

Prerequisite Units:

MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB524	Statistical Inference
MAB533	Statistical Techniques
MAB623	Financial Mathematics

Scientific Computation and Visualisation

MAN681	Advanced Visualisation and Data Analysis

Prerequisite Mathematics Units:

MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB281	Mathematics for Computer Graphics
MAB480	Introduction to Scientific Computation
MAB481	Visualisation and Data Analysis

Discrete Mathematics

Postgraduate Mathematics Unit:

MAN778	Applications of Discrete Mathematics

Prerequisite Units:

MAB111   Mathematical Sciences 1B

MAB112   Mathematical Sciences 1C

MAB461   Discrete Mathematics

Mathematics for Secondary Teaching

Postgraduate mathematics units:

MAN700   Project

Or other postgraduate mathematics units totalling 24 credit points.

null

Other mathematics units:

Students would usually select across a range of areas of mathematics and statistics.

null

Non-mathematics units:

Students could select up to 24 credit points from units offered by the Faculty of Education related to the teaching of mathematics.

Potential Careers:

Actuary, Mathematician, Quantitative Analyst, Statistician.

Master of Mathematical Science (MA85)

Year offered: 2009
Admissions: Yes
CRICOS code: 046042K
Course duration (full-time): 3 semesters (1.5 years)
Course duration (part-time): 6 semesters (3 years)
Domestic fees (indicative): 2009: Full fee tuitin $7,000 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February, July or Summer Program
International Entry: February and July
Total credit points: 144
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Troy Farrell
Campus: Gardens Point

Entry Requirements

To be eligible to enrol an applicant will normally have completed an undergraduate degree in any discipline. Students who do not have sufficient background in introductory calculus may be advised to enrol in MA65 Graduate Certificate in Mathematical Sciences first.

Prior to Enrolment

Potential applicants for this course are advised to contact the Course Coordinator prior to submitting their application to discuss their plans. International students in particular, should be aware that full-time enrolment of at least 36 credit points per semester may not be possible. This is due to the need to meet unit prerequisites. Units are not offered externally although units do have varying amounts of on-line material available. Lectures, tutorials and computer-based practicals may be timetabled during the day or early evening.

Career Outcomes

Knowledge and skills in mathematics and/or statistical techniques are increasingly in demand in many different areas. For example, quantitative analysis in the finance area; statistical and mathematical modelling in natural resources and health management; operations research in transport management.

Course Design

The program of study for an individual student will be decided in consultation with the course coordinator and will take into account the student's background and area of interest within the mathematical sciences.

For the Masters program, at least 36 credit points must be taken from postgraduate mathematics units other than Mathematical Foundations and/or Mathematics. Up to 24 credit points can be taken from units other than mathematics units and there is a limit of 48 credit points from project units.

Overview

This course enables graduates from any discipline to develop their knowledge and skills in one or more areas of the mathematical sciences. Strands available include mathematical modelling/applied mathematics, computational mathematics, statistics/statistical modelling, quantitative analysis/financial mathematics, operations research and scientific computation and visualisation. It recognises that students may not have studied mathematics for some time.

Contact Details

Course Coordinator
Dr Troy Farrell
Phone: +61 7 3138 2364
Email: sms.coursework@qut.edu.au

Course structure

- At least 36 credit points must be taken from postgraduate mathematics units other than MAN200 Mathematical Foundations and/or MAN201 Mathematics.
- Up to 24 credit points can be taken from other than mathematics units.
- Limit of 48 credit points can be taken from project units.

  Your planned program of study should be decided in consultation with the Course Coordinator. It will take into account your background and area of interest within the mathematical sciences. Strands represent areas of the mathematical sciences which may be of interest to you and the units listed under each strand can guide you in developing your planned program. Students will usually select units from one or two strands only.

  The following postgraduate mathematics units are available in all strands (subject to the limit on credit points from project units):

MAN200	Mathematical Foundations
MAN201	Mathematics
MAN700	Project
MAN717	Minor Project
MAN787-1	Project
MAN787-2	Project
MAN787-3	Project

  If you wish to take any of the above units you will need to discuss your plans and the proposed content with the Course Coordinator.

Strand Information

The following strand information is to assist you with unit selection. You do not have to enrol in all units listed for a strand. The prerequisite units are given to guide you. Depending on your background, you may have already covered some of the units listed (or equivalent units) in your undergraduate studies. If you have not studied any mathematics for some time, you may need to undertake one or two units prior to commencing those listed in the strand information.

Mathematical Modelling/Applied Mathematics

Postgraduate Mathematics Units:
MAN761	Analysis
MAN764	Applied Mathematical Modelling
MAN774	Perturbation Methods
MAN777	Mathematics of Fluid Flow

Prerequisite Units:
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB220	Computational Mathematics 1
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB413	Differential Equations
MAB422	Mathematical Modelling
MAB521	Applied Mathematics 3
MAB613	Partial Differential Equations
MAB672	Advanced Mathematical Modelling

Computational Mathematics

Postgraduate Mathematics Unit:
MAN771	Computational Mathematics 4

Prerequisite Units:
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB220	Computational Mathematics 1
MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB420	Computational Mathematics 2
MAB480	Introduction to Scientific Computation
MAB522	Computational Mathematics 3

Operations Research

Postgraduate Mathematics Units:
MAN768	Advanced Techniques in Operations Research

Prerequisite Units:
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB315	Operations Research 2
MAB525	Operations Research 3A
MAB625	Operations Research 3B

Statistics/Statistical Modelling

Postgraduate Mathematics Units:
MAN536	Time Series Analysis
MAN624	Applied Statistics
MAN765	Bayesian Data Analysis
MAN766	Applied Time Series Analysis
MAN775	Statistical Modelling of Financial Processes

Prerequisite Units:
MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB314	Statistical Modelling 2
MAB414	Applied Statistics 2
MAB524	Statistical Inference
MAB533	Statistical Techniques

Quantitative Analysis/Financial Mathematics

Postgraduate Mathematics Units:
MAN536	Time Series Analysis
MAN624	Applied Statistics
MAN765	Bayesian Data Analysis
MAN766	Applied Time Series Analysis
MAN769	Mathematics of Finance
MAN775	Statistical Modelling of Financial Processes

Prerequisite Units:
MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB524	Statistical Inference
MAB533	Statistical Techniques
MAB623	Financial Mathematics

Scientific Computation and Visualisation

MAN681	Advanced Visualisation and Data Analysis

Prerequisite Mathematics Units:
MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB281	Mathematics for Computer Graphics
MAB480	Introduction to Scientific Computation
MAB481	Visualisation and Data Analysis

Discrete Mathematics

Postgraduate Mathematics Unit:
MAN778	Applications of Discrete Mathematics

Prerequisite Units:
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB461	Discrete Mathematics

Mathematics for Secondary Teaching

Postgraduate mathematics unit:

MAN700   Project

Plus at least one other postgraduate mathematics unit (or other combination to give at least 36 credit points from appropriate postgraduate mathematics units)

null

Other mathematics units:

Students would usually select across a range of areas of mathematics and statistics

null

Non-mathematics units:

Students can select up to 24 credit points from units offered by the Faculty of Education related to the teaching of mathematics

Potential Careers:

Actuary, Mathematician, Quantitative Analyst, Statistician.

Bachelor of Applied Science - Medical Radiation Technology (Medical Imaging Technology) (PH38)

Year offered: 2009
Admissions: Yes
CRICOS code: 037588F
Course duration (full-time): 3 Years
Domestic fees (indicative): 2009: CSP $3,497 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 418182
Past rank cut-off: 95
Past OP cut-off: 4
Assumed knowledge: English (4, SA), Maths B (4, SA) and Physics (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. PHYSICS: QUT unit Introductory Physics 1H as a visiting student or QUT Continuing Professional Education course Physics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 288
Standard credit points per full-time semester: 48
Course coordinator: Associate Professor Pam Rowntree
Discipline coordinator: Debbie Starkey
Campus: Gardens Point

Career Opportunities

After graduating from the Medical Imaging Technology major, you may be employed as a medical imaging technologist or diagnostic radiographer. As a radiographer you will play a key role within the health care industry by providing referring medical practitioners with additional diagnostic information to assist in patient management and treatment. You may become a team member in a radiology department in a hospital, private radiology practice or health department, or you may be employed in medical equipment sales.

OP Guarantee

The OP Guarantee does not apply to this program.

Other Majors

See also the separate entry for the following major in this course: Bachelor of Applied Science - Medical Radiation Technology (Radiotherapy Technology).

Special Requirements

1. **Clinical Experience**: Students are required to undertake clinical experience in hospital departments and private practices during the course and, as a result, will have direct patient contact during their clinical placement, and may be exposed to blood and body fluids of patients. Students must be vaccinated for Hepatitis B and must provide a post-vaccination pathological report or similar certification showing proof of immunity, prior to undertaking their first clinical placement. CPR certification is also required to undertake clinical placements.

2. **Blue Card**: A current Blue Card authorised with QUT is required prior to commencing the clinical placement components in this course. Please read the Blue Card information (http://bluecard.qut.com) and ensure that you allow adequate time for processing your application and issuing of the card in order to avoid clinical experience delays.

Other Course Requirements

Students in this course should satisfy criteria related to health status. Students must declare height, physical disabilities, treatment of nervous condition and/or drug/alcohol disorder, and a current immunisation status (specifically Hepatitis B) as part of the online enrolment process.

Professional Recognition

On graduation, students will be eligible for provisional accreditation by the Australian Institute of Radiography. Full membership requires the completion of an additional professional development year of clinical experience.

The Medical Radiation Technologists Board of Queensland (MRTBQ) has introduced English language proficiency requirements for applicants for whom English is not the primary language who wish to be registered in Queensland. Refer MRTBQ website for current policy details - http://www.mrtboard.qld.gov.au/.

The Australian Institute of Radiography (AIR) has specific language requirements for international students seeking accreditation in Australia - see www.air.asn.au for further details.

Why Choose this Course?

QUT is the only university to offer a Medical Imaging Technology degree in Queensland. Excellent employment prospects can be expected as QUT works closely with the health industry to ensure that the number of graduates is in line with industry demand. In recent years, over 95 per cent of graduates have been employed within four months of graduation.

This course is designed in consultation with clinical staff from radiology departments, so you'll gain advanced knowledge of new diagnostic techniques and equipment used in the workplace. QUT's well equipped X-ray laboratories allow you to graduate with experience using equipment and techniques similar to those used in industry. Clinical placements in hospitals and private practices provide an opportunity to use your skills in a real workplace.

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, portfolios, auditions, prior study or work

experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Contact Details
Course Coordinator
Associate Professor Pam Rowntree
Phone: +61 7 3138 2346
Email: p.rowntree@qut.edu.au

Discipline Coordinator
Debbie Starkey
Phone: +61 7 3138 2596
Email: d.starkey@qut.edu.au

Domestic student tuition fee (Dfee) places

Undergraduate domestic full fee places (Dfee) are not available in this course. Tuition fees are only applicable to currently enrolled students who were unable to comply with regulations regarding their original Commonwealth Supported place (ie failure to lodge an eCAF, has consumed all of their Student Learning Entitlement, etc) and who have been invited and accepted to continue as a fee-paying student.

Course structure - Medical Imaging Technology

Year 1, Semester 1	
LSB145	Anatomy 1
PCB007	Patient Care in Professional Practice
PCB178	Principles of Medical Radiations
PCB272	Radiation Physics

Year 1, Semester 2	
LSB245	Anatomy 2 and Introductory Pathology
PCB276	General Radiography 1
PCB277	Radiographic Practice
PCB675	Radiation Safety and Biology

Year 2, Semester 1	
LSB321	Systematic Pathology
LSB345	Regional & Imaging Anatomy 1
PCB375-1	Radiographic Equipment
PCB377	General Radiography 2
PCB379	Clinical Radiography 1

Year 2, Semester 2	
LSB445	Regional and Imaging Anatomy 2
PCB375-2	Radiographic Equipment
PCB476	Special Procedures
PCB477	Complementary Imaging Techniques
PCB479	Clinical Radiography 2

Year 3, Semester 1	
PCB567	Advanced Radiographic Technique 1
PCB580-1	Clinical Radiography 3
PCB593	Digital Image Processing
PCB672-1	Project
PCB681	Computed Tomography Imaging

Year 3, Semester 2	
PCB580-2	Clinical Radiography 3
PCB667	Advanced Radiographic Technique 2
PCB672-2	Project
PCB682	Magnetic Resonance Imaging

Potential Careers:

Medical Imaging Technologist, Radiographer.

Bachelor of Applied Science - Medical Radiation Technology (Radiotherapy Technology) (PH38)

Year offered: 2009
Admissions: Yes
CRICOS code: 037588F
Course duration (full-time): 3 Years
Domestic fees (indicative): 2009: CSP $3,497 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February: Fixed Closing Date - 28 November 2008.
QTAC code: 418192
Past rank cut-off: 91 and a successful questionnaire (see Additional Entry Requirements)
Past OP cut-off: 6 and a successful questionnaire (see Additional Entry Requirements)
Assumed knowledge: English (4, SA), Maths B (4, SA) and Physics (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. PHYSICS: QUT unit Introductory Physics 1H as a visiting student or QUT Continuing Professional Education course Physics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 288
Standard credit points per full-time semester: 48
Course coordinator: Associate Professor Pam Rowntree
Campus: Gardens Point

Career Opportunities

As a graduate, you may be employed as a radiation therapist in a radiotherapy department of a major hospital or private institution. You may become a member of a team which treats cancer and is responsible for planning and delivering prescribed radiation doses.

Other Majors

See also the separate entry for the following major in this course: Bachelor of Applied Science - Medical Radiation Technology (Medical Imaging Technology).

Additional Entry Requirements

Radiotherapy Technology applicants are required to complete an online questionnaire which will be available at **addentry.qut.com** in late August.

The due date to submit the questionnaire is 26 September 2008. Late submissions will be accepted up until 28 November. Submissions after 28 November will not be accepted.

Fixed Closing Date

Applications for this program closed on **30 November**.

OP Guarantee

The OP Guarantee does not apply to this course.

Other Course Requirements

Students in this course should satisfy criteria related to health status. Students must declare height, physical disabilities, treatment of nervous condition and/or drug/alcohol disorder, and a current immunisation status (specifically Hepatitis B) as part of the online enrolment process.

Special Course Requirements

1. **Clinical Experience**: Students are required to undertake clinical experience in hospital departments and private practices during the course and, as a result, will have direct patient contact during their placement, and may be exposed to blood and body fluids of patients. Students must be vaccinated for Hepatitis B and must provide a post-vaccination pathological report or similar certification showing proof of immunity, prior to undertaking their first clinical placement. CPR certification is also required to undertake clinical placements.

2. **Blue Card**: A current Blue Card authorised with QUT is required prior to commencing the clinical placement components in this course. Please read the Blue Card information (http://bluecard.qut.com) and ensure that you allow adequate time for processing your application and issuing of the card in order to avoid clinical experience delays.

Professional Recognition

On graduation, students will be eligible for provisional accreditation by the Australian Institute of Radiography. Full membership requires the completion of an additional professional development year of clinical experience.

The Medical Radiation Technologists Board of Queensland (MRTBQ) has introduced English language proficiency requirements for applicants for whom English is not the primary language who wish to be registered in Queensland. Refer MRTBQ website for current policy details - http://www.mrtboard.qld.gov.au/.

The Australian Institute of Radiography (AIR) has specific language requirements for international students seeking accreditation in Australia - see www.air.asn.au for further details.

Why Choose this Course?

QUT is the only university to offer a Radiotherapy Technology degree in Queensland. Excellent employment prospects can be expected as QUT works closely with the health industry to ensure that the number of graduates is in line with industry demand. In recent years, over 95 per cent of graduates have been employed within four months of graduation.

This course is designed in consultation with clinical staff from radiation oncology departments, so you'll gain advanced knowledge of new treatment techniques and equipment used in the workplace. QUT's well equipped laboratories allow you to graduate with experience using

equipment and techniques similar to those used in industry. Close links with local oncology departments allow students to complete practical work and clinical placements using specialised, state-of-the-art radiotherapy equipment.

Contact Details

Course Coordinator
Associate Professor Pam Rowntree
Phone: +61 7 3138 2346
Email: p.rowntree@qut.edu.au

Deferment

QUT's deferment policy does not apply to this course.

Domestic student tuition fee (Dfee) places

Undergraduate domestic full fee places (Dfee) are not available in this course. Tuition fees are only applicable to currently enrolled students who were unable to comply with regulations regarding their original Commonwealth Supported place (ie failure to lodge an eCAF, has consumed all of their Student Learning Entitlement, etc) and who have been invited and accepted to continue as a fee-paying student.

Course structure - Major in Radiotherapy Technology

Year 1, Semester 1

LSB145	Anatomy 1
PCB007	Patient Care in Professional Practice
PCB178	Principles of Medical Radiations
PCB272	Radiation Physics

Year 1, Semester 2

LSB245	Anatomy 2 and Introductory Pathology
PCB286	Treatment Planning 1
PCB287	Megavoltage Therapy 1
PCB675	Radiation Safety and Biology

Year 2, Semester 1

LSB321	Systematic Pathology
LSB345	Regional & Imaging Anatomy 1
PCB389	Clinical Radiotherapy 1
PCB396	Radiotherapy Planning and Physics
PCB397-1	Megavoltage Therapy 2

Year 2, Semester 2

LSB445	Regional and Imaging Anatomy 2
PCB397-2	Megavoltage Therapy 2
PCB489	Clinical Radiotherapy 2
PCB495	Computer Assisted Treatment Planning 1
PCB496	Radiotherapy Equipment

Year 3, Semester 1

PCB587	Specialised Radiotherapy Technique 1
PCB590-1	Clinical Radiotherapy 3

PCB593	Digital Image Processing
PCB595	Computer Assisted Treatment Planning 2
PCB672-1	Project

Year 3, Semester 2

PCB590-2	Clinical Radiotherapy 3
PCB672-2	Project
PCB687	Specialised Radiotherapy Technique 2
PCB695	Advanced Treatment Planning Topics

Potential Careers:

Radiation Therapist.

Graduate Certificate in Applied Science (Breast Ultrasound) (PH60)

Year offered: 2009
Admissions: Yes
Course duration (part-time): 2 semesters (1 year)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Domestic Entry: February
Total credit points: 48
Standard credit points per part-time semester: 24
Course coordinator: Associate Professor Pam Rowntree
Discipline coordinator: Natasha Kazich
Campus: Gardens Point

Entry requirements

To be eligible to enrol, an applicant will normally be qualified as a medical imaging technologist (diagnostic radiographer) at degree or diploma level and have a minimum of two years experience in a clinical medical imaging practice. Students must give written proof of access to suitable clinical experience for the duration of the course.

Applicants with other qualifications and appropriate experience may be permitted to enrol subject to the approval of the Head of School of Physical and Chemical Sciences.

Professional Recognition

This course is accredited with the Australasian Sonographer Accreditation Registry (ASAR).

Course Design

Students must be employed in a suitable clinical practice with adequate access to clinical experience for the duration of the course. Formal lectures are conducted in an intensive one-week block of classes at the beginning of each semester. Further academic requirements can be met without requiring on-campus attendance. If students are not based in Brisbane, this structure allows attendance by offering the formal classroom component in an intensive one-week block in each semester.

Overview

The Graduate Certificate in Applied Science (Breast Ultrasound) course offers studies specifically in breast ultrasound techniques. Students are given the scientific basis for understanding, using and evaluating relevant equipment and techniques. The course particularly suits radiographers, medical imaging technologists and sonographers who are interested in an in-depth study of this rapidly developing speciality area of ultrasound.

Contact Details

Course Coordinator
Associate Professor Pam Rowntree
Phone: +61 7 3138 2346
Email: p.rowntree@qut.edu.au

Discipline Coordinator
Natasha Kazich
Phone: +61 7 3138 2490
Email: n.kazich@qut.edu.au

Course structure

To complete the Graduate Certificate in Applied Science (Breast Ultrasound) students must complete the units listed below (total 48 credit points)

Semester 1

PCN162	Principles of Medical Ultrasound
PCN187	Specialist Studies - Breast Ultrasound Strand
PCN397-1	Clinical Attachment

Semester 2

PCN184	Breast Imaging
PCN397-2	Clinical Attachment
NOTE:	The PCN397 clinical attachment unit is a 2 semester unit

Potential Careers:

Sonographer.

Graduate Certificate in Lighting (on-shore) (PH62)

Year offered: 2009
Admissions: Yes
Course duration (part-time): 2 semesters (1 year) (Internal and External)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Domestic Entry: July
Total credit points: 48
Standard credit points per part-time semester: 24
Course coordinator: Associate Professor Ian Cowling
Campus: Gardens Point

Overview

The Graduate Certificate in Lighting (PH62) is designed primarily for people working in all areas of the lighting industry and engineers or architects whose work includes some aspects of lighting.

The Graduate Certificate in Lighting (PH62) provides an overview of all aspects of lighting, including light measurement, lamp properties and luminaire design, design of lighting installations, daylighting and the human factors associated with lighting.

The Graduate Diploma (PH72) then provides, through electives, the opportunity for some degree of specialisation appropriate to the student's needs and interests.

Finally the Master of Lighting (PH82) provides the opportunity for graduates of the above programs to undertake a Masters in the form of a project with some coursework.

Entry Requirements

(a) Bachelor level degree in an appropriate field

OR

(b) Demonstrated minimum of 3 years of relevant experience in the lighting industry and successful completion of one or more recognised Introductory Courses in Lighting as determined by the Course Coordinator. (Note: Students entering without a Bachelor degree can only enrol initially in PH62, and must successfully complete this program before they can enrol in PH72 or PH82.)

Note: Students with relevant experience in the lighting industry or recognised educational qualifications in lighting may be granted credit in PH62/PH63 to a maximum of 24 credit points.

Course Design

Graduate Certificate students will undertake four units (12 credit points each) covering the perception, specification and measurement of light, lamp and luminaire design, lighting design, sustainability issues and human factors.

Contact Details

Course Coordinator

Associate Professor Ian Cowling
Phone: +61 7 3138 2592
Email: i.cowling@qut.edu.au

Course structure - Part-time

Year 1, Semester 2 (July to October)	
PCN121	Vision Colour and Photometry
PCN124	Lamps and Luminaires

Year 2, Semester 1 (February to June)	
PCN122	Lighting Design
PCN123	Sustainability and Human Factors

NOTES: PH62 is offered part-time comprising a lecture/tutorial format, and where appropriate practical and field work. Some units will have a significant computer-design type component and all units will incorporate learning through assignment work, all of which will be incorporated into the assessment program. Most units in the internal mode will be offered in block format on weekends.

Domestic students in the Graduate Certificate in Lighting (PH62) will be invited, on successful completion of 48 credit points, to continue with studies in the Graduate Diploma in Lighting (PH72), or can enrol directly in Master of Lighting (PH82).

International students wishing to change courses should consult International Student Business Services.

Potential Careers:

Architect , Electrical Contractor, Electrical Engineer, Energy Consultant, Industrial Designer, Landscape Architect, Lighting Designer, Lighting Technician, Luminaire Designer, Physicist, Sales Person, Scientist, Theatre Lighting.

Graduate Certificate in Lighting (off-shore) (PH63)

Year offered: 2009
Admissions: Yes
Course duration (external): 2 semesters part-time (Hong Kong)
Domestic fees (per credit point): Off-shore Course *(subject to annual review)*
International Entry: September
Total credit points: 48
Standard credit points per part-time semester: 24
Course coordinator: Associate Professor Ian Cowling
Campus: City University of Hong Kong

Overview

The Graduate Certificate in Lighting (PH63) is designed primarily for people working in any area of lighting, whether it be design or application, sales or installation, purpose directed or just entertainment.

The Graduate Certificate in Lighting (PH63) is designed to provide an overview of all aspects of lighting, including light measurement, luminaire design, design of lighting installations, sustainability, daylighting and the human aspects associated with providing good lighting.

The Graduate Diploma (PH73) then provides, through electives, the opportunity for some degree of specialisation appropriate to the student's needs and interests.

Finally the Master of Lighting (PH83) provides the opportunity for graduates of the above programs to undertake a Masters in the form of a project with some coursework.

Entry Requirements

(a) Bachelor level degree in an appropriate field

OR

(b) Demonstrated minimum of 3 years of relevant experience in the lighting industry and successful completion of one or more recognised Introductory Courses in Lighting as determined by the Course Coordinator. (Note: Students entering without a Bachelor degree can only enrol initially in PH63, and must successfully complete this program before they can enrol in PH73 or PH83.)

Note: Students with relevant experience in the lighting industry or recognised educational qualifications in lighting may be granted credit in PH62/PH63 to a maximum of 24 credit points.

Course Design

Graduate Certificate students will undertake four units (12 credit points each) covering the perception, specification and measurement of light, lamp and luminaire design, lighting design, daylighting and the human factors of lighting.

Course Details

Course Coordinator

Associate Professor Ian Cowling
Phone: +61 7 3138 2592
Email: i.cowling@qut.edu.au

Course structure - Part-time

Year 1, Semester 2 (September to December)	
PCZ121	Vision Colour and Photometry
PCZ124	Lamps and Luminaires

Year 2, Semester 1 (January to April)	
PCZ122	Lighting Design
PCZ123	Sustainability and Human Factors

NOTES: PH63 is offered part-time in a combination of face-to-face lecture/tutorial/practical format, and on-line. Some units will have a computer-design type component and all units will incorporate learning through assignment work, all of which will be incorporated into the assessment program. The two units offered each semester will be presented sequentially. The face-to-face teaching component will be offered in block form over a weekend, usually on the first weekend of the teaching period assigned to that unit. There will then be a follow-up face-to-face session about three weekends later.

Students in the Graduate Certificate in Lighting (PH63) wishing to continue their studies in the Graduate Diploma of Lighting (PH73), on successful completion of 48 credit points, are required to seek admission using an International Student Degree Program Application (F) Form.

Potential Careers:

Architect , Electrical Contractor, Electrical Engineer, Energy Consultant, Industrial Designer, Landscape Architect, Lighting Designer, Lighting Technician, Luminaire Designer, Physicist, Sales Person, Scientist, Theatre Lighting.

Graduate Diploma in Applied Science (Medical Physics) (PH71)

Year offered: 2009
Admissions: Yes
CRICOS code: 020315D
Course duration (full-time): 2 semesters (1 year)
Course duration (part-time): 4 semesters (2 years)
Domestic fees (indicative): 2009: CSP $3,701 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February and July
International Entry: February and July
Total credit points: 96
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Andrew Fielding
Campus: Gardens Point

Entry Requirements

Applicants must possess an acceptable tertiary course with a major in physics. Applicants with other qualifications (eg engineering) may enrol with the approval of the Head of the School of Physical and Chemical Sciences. In some instances, a modified program may be necessary.

Course Design

This degree comprises assessed coursework such as advanced lectures, seminars, reading courses or independent study. If undertaken full-time, students will need an average of 14 hours a week of formal contact.

Students who have completed the Graduate Diploma may enter Stage 2 of the Master of Applied Science - PH80 where they undertake a program of supervised research and investigation that can be completed at QUT, or in a suitable external institution.

Professional Recognition

The course has been accredited by the Australasian College of Physical Sciences and Engineers in Medicine (ACPSEM) and graduates of the course will receive exemptions for the academic requirements of the ACPSEM Training, Education and Accreditation Program (TEAP) for Medical Physicists. Full exemption will be granted for the Master of Applied Science and coursework component exemption will be granted for the Graduate Diploma. The TEAP is a 5 year registrar training program leading to accreditation as a Medical Physicist and further details may be found at www.acpsem.org.au.

Overview

The Graduate Diploma/Master of Applied Science (Medical Physics) deals with well-established and emerging areas of medical and health physics and includes the following topics: clinical measurement, computing, health physics, instrumentation, medical electronics, medical imaging, physiological monitoring, physics of radiotherapy, radiobiology, radiological imaging sciences.

The coursework also contains an introduction to the clinical sciences. From this, prospective medical physicists learn to appreciate the clinical nature of medical situations and how to communicate better with other clinical staff.

Graduates can seek employment in hospitals, health departments, mining companies, tertiary institutions and medical instrumentation companies. Depending on the field of employment, graduates may be known as a medical physicist, health physicist or bio-engineer. Duties as a professional medical physicist include:

- applying electronics, ultrasonics, radiation and computers to clinical and environmental problems
- monitoring the environment to maintain acceptable standards in the workplace and the community
- applying fundamental physical research in development programs
- responsibility for calibration, care and maintenance of instruments and apparatus.

Contact Details

Course Coordinator
Dr Andrew Fielding
Phone: +61 7 3138 5325
Email: a.fielding@qut.edu.au

Course structure - First Semester Entry - Full-time Course

Year 1, Semester 1 (February to June)	
LSB142	Human Anatomy and Physiology
PCN113	Radiation Physics
PCN114	Microprocessors and Instrumentation
PCN211	Physics of Medical Imaging

Year 1, Semester 2 (July to October)	
PCN112	Medical Imaging Science
PCN212	Radiotherapy
PCN214	Health and Occupational Physics
PCN218	Research Methodology and Professional Studies

Course structure - First Semester Entry - Part-time Course

Year 1, Semester 1 (February to June)	
LSB142	Human Anatomy and Physiology
PCN113	Radiation Physics

Year 1, Semester 2 (July to October)	
PCN112	Medical Imaging Science
PCN212	Radiotherapy

Year 2, Semester 1 (February to June)	
PCN114	Microprocessors and Instrumentation
PCN211	Physics of Medical Imaging

Year 2, Semester 2 (July to October)	

PCN214	Health and Occupational Physics
PCN218	Research Methodology and Professional Studies

Course structure - Mid-Year Entry - Full-time Course

Year 1, Semester 2 (July to October)	
LSB258	Principles of Human Physiology
PCN112	Medical Imaging Science
PCN212	Radiotherapy
PCN214	Health and Occupational Physics

Year 2, Semester 1 (February to June)	
PCN113	Radiation Physics
PCN114	Microprocessors and Instrumentation
PCN211	Physics of Medical Imaging
PCN218	Research Methodology and Professional Studies

Course structure - Mid-Year Entry - Part-time Course

Year 1, Semester 2 (July to October)	
LSB258	Principles of Human Physiology
PCN112	Medical Imaging Science

Year 2, Semester 1 (February to June)	
PCN113	Radiation Physics
PCN114	Microprocessors and Instrumentation

Year 2, Semester 2 (July to October)	
PCN212	Radiotherapy
PCN214	Health and Occupational Physics

Year 3, Semester 1 (February to June)	
PCN211	Physics of Medical Imaging
PCN218	Research Methodology and Professional Studies

Potential Careers:

Health Physicist, Medical Equipment Sales, Medical Physicist.

Graduate Diploma in Applied Science (Medical Ultrasound) (PH71)

Year offered: 2009
Admissions: Yes
Course duration (part-time): 4 semesters (2 years)
Domestic fees (indicative): 2009: CSP $3,701 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February. Applications are to be made by 1 December in the preceding year.
Total credit points: 96
Standard credit points per part-time semester: 24
Course coordinator: Dr Andrew Fielding
Discipline coordinator: Peter Carlile
Campus: Gardens Point

Entry Requirements

Students will normally be qualified diagnostic radiographers or medical imaging technologists at degree or diploma level, or degree qualified nurses, and have at least two years of experience in a clinical practice. Students must give written proof of access to suitable clinical experience for the duration of the course.

Overview

The Graduate Diploma and Master of Applied Science courses offer studies in medical ultrasound. Students are given the scientific basis for understanding, using and evaluating relevant equipment and techniques. The course particularly suits radiographers, medical imaging technologists and nuclear medicine technologists who are interested in an in-depth study of this rapidly developing area.

Professional Recognition

This course is accredited with the Australasian Sonographer Accreditation Registry (ASAR).

Course Design

This degree consists of two stages. Stage 1 (Graduate Diploma - PH71) takes four semesters of part-time study to complete. Students must show that they have access to suitable clinical experience for the duration of Stage 1 before beginning the degree. Lectures are conducted in intensive 4-5 week blocks in each semester. Students undertake clinical experience throughout the semester.

Stage 2 (Master of Applied Science - PH80) involves completion of a research project and submission of a thesis. Students can undertake this project externally under QUT staff supervision on appointment of a suitable external supervisor. This stage takes two semesters part-time to complete after successful completion of Stage 1.

Contact Details

Course Coordinator
Dr Andrew Fielding
Phone: +61 7 3138 5325
Email: a.fielding@qut.edu.au

Discipline Coordinator
Peter Carlile
Phone: +61 7 3138 2125
Email: p.carlile@qut.edu.au

Course structure - Part-time

Students must complete the units listed below (total 96 credit points)

Year 1, Semester 1

PCN159	Ultrasonic Examination 1
PCN162	Principles of Medical Ultrasound
PCN197-1	Clinical Attachment 1

Year 1, Semester 2

PCN197-2	Clinical Attachment 1
PCN356	Ultrasonic Examination 2

Year 2, Semester 1

PCN297-1	Clinical Attachment 2
PCN355	Vascular Ultrasound
PCN357	Advanced Ultrasound Topics

Year 2, Semester 2

PCN218	Research Methodology and Professional Studies
PCN297-2	Clinical Attachment 2
NOTES	The PCN197 and PCN297 clinical attachment units are 2 semester units
	Each clinical attachment unit (ie PCN197 and PCN297) involves clinical experience in the order of 3 days per week or equivalent.

Potential Careers:

Sonographer.

Graduate Diploma in Lighting (on-shore) (PH72)

Year offered: 2009
Admissions: Yes
Course duration (part-time): 4 semesters (2 years) (Internal and External)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Domestic Entry: July
Total credit points: 96
Standard credit points per part-time semester: 24
Course coordinator: Associate Professor Ian Cowling
Campus: Gardens Point

Overview

The Graduate Diploma in Lighting (PH72) is designed primarily for people working in all areas of the lighting industry and engineers or architects whose work includes some aspects of lighting.

The Graduate Certificate in Lighting (PH62) provides an overview of all aspects of lighting, including light measurement, lamp properties and luminaire design, design of lighting installations, daylighting and the human factors associated with lighting.

The Graduate Diploma (PH72) then provides, through electives, the opportunity for some degree of specialisation appropriate to the student's needs and interests.

Finally the Master of Lighting (PH82) provides the opportunity for graduates of the above programs to undertake a Masters in the form of a project with some coursework.

Entry Requirements

(a) Bachelor level degree in an appropriate field

OR

(b) Successful completion of PH62/PH63 Graduate Certificate in Lighting or equivalent.

Note: Students with relevant experience in the lighting industry or recognised educational qualifications in lighting may be granted credit to a maximum of 36 credit points.

Course Design

Graduate Diploma students will undertake 24 credit points (two units) of advanced lighting design and applications studies and two other units (24 credit points) which could include at least one unit in Project Management, Project Cost and Risk Management or Quality Management.

Contact Details

Course Coordinator

Associate Professor Ian Cowling
Phone: +61 7 3138 2592
Email: i.cowling@qut.edu.au

Course structure - Part-time

Year 1, Semester 2 (July to October)

PCN121	Vision Colour and Photometry
PCN124	Lamps and Luminaires

Year 2, Semester 1 (February to June)

PCN122	Lighting Design
PCN123	Sustainability and Human Factors

Year 2, Semester 2 (July to October)

PCN223	Lighting Applications
	Elective - One unit from:
PCN222	Advanced Lighting Design
PCN224	Applied Lighting

Year 3, Semester 1 (February to June)

PCN221	Best Practices in Lighting
	Elective - One unit from:
CNP520	Project Management
PCN224	Applied Lighting

NOTES: PH72 is offered part-time internally and externally. The course comprises a lecture/tutorial format, and where appropriate practical and field work. Some units will have a significant computer-design type component and all units will incorporate learning through assignment work, all of which will be incorporated into the assessment program. Most units in the internal mode will be offered in block format on weekends. Students enrolling in the external mode will be required to attend QUT for 4 to 5 days per semester for intensive practical and tutorial work.

Domestic students in the Graduate Diploma in Lighting (PH72) will be invited, on successful completion of 96 credit points, to continue with studies in the Master of Lighting (PH82).

Students in the Graduate Diploma in Lighting (PH72) wishing to exit with the Graduate Certificate in Lighting (PH62) are required to submit an Application to Graduate Early with an Approved Exit Course (SRX) Form in their final semester of study.

International students wishing to change courses should consult International Student Business Services.

Potential Careers:

Architect , Electrical Contractor, Electrical Engineer, Energy Consultant, Industrial Designer, Landscape Architect, Lighting Designer, Lighting Technician, Luminaire Designer, Physicist, Sales Person, Scientist, Theatre Lighting.

Graduate Diploma in Lighting (off-shore) (PH73)

Year offered: 2009
Admissions: Yes
Course duration (external): 4 semesters part-time (Hong Kong)
Domestic fees (per credit point): Off-shore Course *(subject to annual review)*
International Entry: September
Total credit points: 96
Standard credit points per part-time semester: 24
Course coordinator: Associate Professor Ian Cowling
Campus: City University of Hong Kong

Overview

The Graduate Diploma in Lighting (PH73) is designed primarily for people working in all areas of the lighting industry and engineers or architects whose work includes some aspects of lighting.

All students in the Graduate Diploma (PH73) will have undertaken the 4 units of the Graduate Certificate in Lighting (PH63), providing an overview of all aspects of lighting, including light measurement, luminaire design, design of lighting installations, sustainability, daylighting and the human aspects associated with providing good lighting.

The Graduate Diploma (PH73) then provides, through electives, the opportunity for some degree of specialisation appropriate to the student's needs and interests.

Finally the Master of Lighting (PH83) provides the opportunity for graduates of the above programs to undertake a Masters in the form of a project with some coursework.

Entry Requirements

(a) Bachelor level degree in an appropriate field

OR

(b) Successful completion of PH62/PH63 Graduate Certificate in Lighting or equivalent.

Note: Students with relevant experience in the lighting industry or recognised educational qualifications in lighting may be granted credit to a maximum of 36 credit points.

Course Design

Graduate Diploma students will undertake 24 credit points (two units) of advanced lighting design and applications studies and two other units (24 credit points) which could include at least one unit in Project Management, Project Cost and Risk Management or Quality.

Contact Details

Course Coordinator

Associate Professor Ian Cowling
Phone: +61 7 3138 2592
Email: i.cowling@qut.edu.au

Course structure - Part-time

First Semester (September to December)

PCZ121	Vision Colour and Photometry
PCZ124	Lamps and Luminaires

Second Semester (January to April)

PCZ122	Lighting Design
PCZ123	Sustainability and Human Factors

Third Semester (May to August)

PCZ222	Advanced Lighting Design
PCZ223	Lighting Applications

Fourth Semester (September to December)

PCZ221	Best Practices in Lighting
PCZ224	Applied Lighting

NOTES: PH73 is offered part-time in a combination of face-to-face lecture/tutorial/practical format, and on-line. Some units will have a computer-design type component and all units will incorporate learning through assignment work, all of which will be incorporated into the assessment program. Except for the fourth semester, the two units offered each semester will be presented sequentially. The face-to-face teaching component will be offered in block form over a weekend, usually on the first weekend of the teaching period assigned to that unit. There will then be a follow-up face-to-face session about three weekends later. In the fourth semester both units will commence at the start of the semester.

Students in the Graduate Diploma in Lighting (PH73) wishing to continue their studies in the Master of Lighting (PH83), on successful completion of 96 credit points, are required to seek admission using an International Student Degree Program Application (F) Form.

Students in the Graduate Diploma in Lighting (PH73) wishing to exit with the Graduate Certificate in Lighting (PH63) are required to submit an Application to Graduate Early with an Approved Exit Course (SRX) Form in their final semester of study.

Potential Careers:

Architect , Electrical Contractor, Electrical Engineer, Energy Consultant, Industrial Designer, Landscape Architect, Lighting Designer, Lighting Technician, Luminaire Designer, Physicist, Sales Person, Scientist, Theatre Lighting.

Graduate Diploma in Cardiac Ultrasound (PH75)

Year offered: 2009
Admissions: Yes
Course duration (part-time): 4 semesters (2 years) (External only)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Domestic Entry: February: Early Closing Date - 1 December 2008. Early closing date for PH75 and PH85 Semester 1 2009 entry, pending quota being filled. Beyond this date, late applicants should contact the course coordinator for admission advice.
Total credit points: 96
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Bonita Anderson
Campus: Gardens Point

Entry Requirements

To be eligible to enrol an applicant will normally have a degree or diploma level qualification in a relevant science or allied health field. In addition the applicant must have a minimum of 3 months full-time equivalent prior supervised, hands-on clinical experience in cardiac ultrasound as well as access to suitable clinical experience for the duration of the course.

Students must give written proof of prior supervised, clinical experience and access to suitable clinical experience for the duration of the course.

Fees: Please note that the Domestic Fees are based on full-time studies. This course is a part-time course. Please refer to Indicative Domestic Fees (http://www.studentservices.qut.edu.au/costs/calculate/indicative.jsp) for information.

Professional Recognition

This course is accredited with the Australasian Sonographer Accreditation Registry (ASAR).

Course Design

This course consists of two stages. Stage 1 (Graduate Diploma in Cardiac Ultrasound - PH75) takes two years of part-time study to complete. Students must be employed in a suitable clinical practice with adequate access to clinical cardiac ultrasound experience for the duration of the course. If students are not based in Brisbane, this structure allows attendance by offering the formal classroom component in an intensive one-week block in each semester.

Stage 2 (Master of Cardiac Ultrasound - PH85) involves the completion of a research project and submission of a thesis. Students can undertake this project internally at QUT, or externally under QUT staff supervision and the guidance of a suitable external supervisor. This stage would normally take one year part-time to complete.

Overview

The Graduate Diploma in Cardiac Ultrasound program offers studies for practicing Cardiac Sonographers. The course is conducted using a combination of block classes of approximately one week's duration in each semester, web-based modules and clinical practice modules.

Contact Details

Course Coordinator
Bonita Anderson
Phone: +61 7 3138 2585
Email: b.anderson@qut.edu.au

Course structure

Year 1, Semester 1	
PCN155	Cardiac Ultrasound 1
PCN162	Principles of Medical Ultrasound
PCN497-1	Clinical Attachment 4

Year 1, Semester 2	
PCN259	Cardiac Ultrasound 2
PCN497-2	Clinical Attachment 4

Year 2, Semester 1	
PCN218	Research Methodology and Professional Studies
PCN359	Cardiac Ultrasound 3
PCN597-1	Clinical Attachment 5

Year 2, Semester 2	
PCN459	Advanced Cardiac Ultrasound
PCN597-2	Clinical Attachment 5

NOTES: The PCN497 and PCN597 clinical attachment units are 2 semester units.

Domestic students in the Graduate Diploma in Cardiac Ultrasound (PH75) will be invited, on successful completion of 96 credit points, to continue with studies in the Master of Cardiac Ultrasound (PH85).

Potential Careers:

Sonographer.

Master of Applied Science (Medical Physics) (PH80)

Year offered: 2009
Admissions: Yes
CRICOS code: 043548G
Course duration (full-time): 3 semesters (1.5 years)
Course duration (part-time): 6 semesters (3 years)
Domestic fees (indicative): 2009: CSP $3,701 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February and July
International Entry: February and July
Total credit points: 144
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Andrew Fielding
Campus: Gardens Point

Other Majors

See also the separate entry for the following major in this course: Master of Applied Science (Medical Ultrasound).

Entry Requirements

Applicants must possess an acceptable tertiary course with a major in physics. Applicants with other qualifications (eg engineering may enrol with the approval of the Head of the School of Physical and Chemical Sciences. In some instances, a modified program may be necessary.

Course Design

This degree consists of two stages. Stage 1 (which is equivalent to the Graduate Diploma - PH71) comprises assessed coursework such as advanced lectures, seminars, reading courses or independent study. If undertaken full-time, students will need an average of 14 hours a week of formal contact.

In Stage 2 (Master of Applied Science - PH80) students undertake a program of supervised research and investigation that can be completed at QUT, or in a suitable external institution. Students can graduate with a Graduate Diploma in Medical Physics after satisfactory completion of Stage 1.

Professional Recognition

The course has been accredited by the Australasian College of Physical Sciences and Engineers in Medicine (ACPSEM) and graduates of the course will receive exemptions for the academic requirements of the ACPSEM Training, Education and Accreditation Program (TEAP) for Medical Physicists. Full exemption will be granted for the Master of Applied Science and coursework component exemption will be granted for the Graduate Diploma. The TEAP is a 5 year registrar training program leading to accreditation as a Medical Physicist and further details may be found at www.acpsem.org.au.

Overview

The Graduate Diploma/Master of Applied Science (Medical Physics) deals with well-established and emerging areas of medical and health physics and includes the following topics: clinical measurement, computing, health physics, instrumentation, medical electronics, medical imaging, physiological monitoring, physics of radiotherapy, radiobiology, radiological imaging sciences.

The coursework also contains an introduction to the clinical sciences. From this, prospective medical physicists learn to appreciate the clinical nature of medical situations and how to communicate better with other clinical staff.

Graduates can seek employment in hospitals, health departments, mining companies, tertiary institutions and medical instrumentation companies. Depending on the field of employment, graduates may be known as a medical physicist, health physicist or bio-engineer. Duties as a professional medical physicist include:

- applying electronics, ultrasonics, radiation and computers to clinical and environmental problems
- monitoring the environment to maintain acceptable standards in the workplace and the community
- applying fundamental physical research in development programs
- responsibility for calibration, care and maintenance of instruments and apparatus.

Contact Details

Course Coordinator
Dr Andrew Fielding
Phone: +61 7 3138 5325
Email: a.fielding@qut.edu.au

Course structure - First Semester Entry - Full-time Course

STAGE 1: Students must complete units from the list below, totalling 96 credit points:

Year 1, Semester 1 (February to June)	
LSB142	Human Anatomy and Physiology
PCN113	Radiation Physics
PCN114	Microprocessors and Instrumentation
PCN211	Physics of Medical Imaging

Year 1, Semester 2 (July to October)	
PCN112	Medical Imaging Science
PCN212	Radiotherapy
PCN214	Health and Occupational Physics
PCN218	Research Methodology and Professional Studies

STAGE 2: Project over One Semester or Summer Program	
PCN520	Project (Full-time)

Course structure - First Semester Entry - Part-time Course

STAGE 1: Students must complete units from the list below, totalling 96 credit points:

Year 1, Semester 1 (February to June)	
LSB142	Human Anatomy and Physiology
PCN113	Radiation Physics

Year 1, Semester 2 (July to October)	
PCN112	Medical Imaging Science
PCN212	Radiotherapy

Year 2, Semester 1 (February to June)	
PCN114	Microprocessors and Instrumentation
PCN211	Physics of Medical Imaging

Year 2, Semester 2 (July to October)	
PCN214	Health and Occupational Physics
PCN218	Research Methodology and Professional Studies

STAGE 2: Project over Two Semesters:	
PCN540-1	Project (Part-time)
PCN540-2	Project (Part-time)

Course structure - Mid-Year Entry - Full-time Course

STAGE 1: Students must complete units from the list below, totalling 96 credit points:	

Year 1, Semester 2 (July to October)	
LSB258	Principles of Human Physiology
PCN112	Medical Imaging Science
PCN212	Radiotherapy
PCN214	Health and Occupational Physics

Year 2, Semester 1 (February to June)	
PCN113	Radiation Physics
PCN114	Microprocessors and Instrumentation
PCN211	Physics of Medical Imaging
PCN218	Research Methodology and Professional Studies

STAGE 2: Project over One Semester or Summer Program	
PCN520	Project (Full-time)

Course structure - Mid-Year Entry - Part-time Course

STAGE 1: Students must complete units from the list below, totalling 96 credit points:	

Year 1, Semester 2 (July to October)	
LSB258	Principles of Human Physiology
PCN112	Medical Imaging Science

Year 2, Semester 1 (February to June)	
PCN113	Radiation Physics
PCN114	Microprocessors and Instrumentation

Year 2, Semester 2 (July to October)	
PCN212	Radiotherapy
PCN214	Health and Occupational Physics

Year 3, Semester 1 (February to June)	
PCN211	Physics of Medical Imaging
PCN218	Research Methodology and Professional Studies

STAGE 2: Project over Two Semesters:	
PCN540-1	Project (Part-time)
PCN540-2	Project (Part-time)

Potential Careers:

Health Physicist, Medical Equipment Sales, Medical Physicist, Medical Scientist.

Master of Applied Science (Medical Ultrasound) (PH80)

Year offered: 2009
Admissions: Yes
Course duration (part-time): 6 semesters (3 years)
Domestic fees (indicative): 2009: CSP $3,701 (indicative) per semester
International Fees (per semester): 2009: $10,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February. Applications are to be made by 1 December in the preceding year.
Total credit points: 144
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Andrew Fielding
Discipline coordinator: Peter Carlile
Campus: Gardens Point

Other Majors

See also the separate entry for the following major in this course: Master of Applied Science (Medical Physics).

Entry Requirements

Students will normally be qualified diagnostic radiographers or medical imaging technologists at degree or diploma level, or degree qualified nurses, and have at least two years of experience in a clinical practice. Students must give written proof of access to suitable clinical experience for the duration of the course.

Professional Recognition

This course is accredited with the Australasian Sonographer Accreditation Registry (ASAR).

Course Design

This degree consists of two stages. Stage 1 (Graduate Diploma - PH71) takes four semesters of part-time study to complete. Students must show that they have access to suitable clinical experience for the duration of Stage 1 before beginning the degree. Lectures are conducted in intensive four to five week blocks in each semester. Students undertake clinical experience throughout the semester.

Stage 2 (Master of Applied Science - PH80) involves completion of a research project and submission of a thesis. Students can undertake this project externally under QUT staff supervision on appointment of a suitable external supervisor. This stage takes two semesters part-time to complete after successful completion of Stage 1.

Overview

The Master of Applied Science (PH80) course offers studies in medical ultrasound. Students are given the scientific basis for understanding, using and evaluating relevant equipment and techniques. The course particularly suits radiographers, medical imaging technologists and nuclear medicine technologists who are interested in an in-depth study of this rapidly developing area.

Contact Details

Course Coordinator
Dr Andrew Fielding
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Discipline Coordinator
Peter Carlile
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Email: p.carlile@qut.edu.au top

Course structure - First Semester Entry - Part-time Course

STAGE 1: Students must complete the units listed below, totalling 96 credit points:

Year 1, Semester 1

PCN159	Ultrasonic Examination 1
PCN162	Principles of Medical Ultrasound
PCN197-1	Clinical Attachment 1

Year 1, Semester 2

PCN197-2	Clinical Attachment 1
PCN356	Ultrasonic Examination 2

Year 2, Semester 1

PCN297-1	Clinical Attachment 2
PCN355	Vascular Ultrasound
PCN357	Advanced Ultrasound Topics

Year 2, Semester 2

PCN218	Research Methodology and Professional Studies
PCN297-2	Clinical Attachment 2
NOTES	- The Clinical Ultrasound units PCN197 and PCN297 are 2 semester units.
	- Each clinical attachment unit (ie PCN197 and PCN297) involves clinical experience in the order of 3 days per week or equivalent.

STAGE 2: null

Project over One Semester or Summer Program:

PCN520	Project (Full-time)

Project over Two Semesters:

PCN540-1	Project (Part-time)
PCN540-2	Project (Part-time)
NOTE	A student may request an extension of time in which to submit the project report for assessment. A request for an extension of time up to a maximum of six months shall be made in writing through the Head of School to the Dean. Any request for a further extension, or any request for an extension to a date later than six months after the original due date, shall be made in writing to the Academic Board. The Academic Board may grant the

extension under such conditions as it may consider appropriate, or may award the student a "Fail" result in the project unit. A student who has received a "Fail" result in the project unit may re-enrol in the unit only in exceptional circumstances and with the express permission of the Academic Board.

Potential Careers:

Sonographer.

Master of Lighting (on-shore) (PH82)

Year offered: 2009
Admissions: Yes
CRICOS code: 058287A
Course duration (full-time): 3 semesters (1.5 years) (Internal only)
Course duration (part-time): 6 semesters (3 years) (Internal and External)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: July
International Entry: July
Total credit points: 144
Standard credit points per part-time semester: 24
Course coordinator: Associate Professor Ian Cowling
Campus: Gardens Point

Overview

The Master of Lighting (PH82) is designed primarily for people working in all areas of the lighting industry and engineers or architects whose work includes some aspects of lighting. It provides the opportunity for graduates of the Graduate Certificate in Lighting (PH62) and the Graduate Diploma in Lighting (PH72) to undertake a Masters in the form of a project with some coursework.

Entry Requirements

(a) Bachelor level degree in an appropriate field

OR

(b) Successful completion of PH62/PH63 Graduate Certificate in Lighting, or PH72/PH73 Graduate Diploma in Lighting, or equivalent.

Note: Students with relevant experience in the lighting industry or recognised educational qualifications in lighting may be granted credit to a maximum of 36 credit points.

Course Design

Masters students will undertake a 24 credit point research project, which may be based within their place of employment and two units (24 credit points) of coursework which may be reading topics associated with their project or other electives taken from any relevant units within the University, on approval of the Course Coordinator.

Contact Details

Course Coordinator

Associate Professor Ian Cowling
Phone: +61 7 3138 2592
Email: i.cowling@qut.edu.au

Course structure - Full-time

Year 1, Semester 2 (July to October)

PCN121	Vision Colour and Photometry
PCN123	Sustainability and Human Factors
PCN124	Lamps and Luminaires
PCN224	Applied Lighting

Year 2, Semester 1 (February to June)

PCN122	Lighting Design
PCN221	Best Practices in Lighting
	Electives - Two units from:
CNP520	Project Management
PCN321	Reading Topic 1
PCN322	Reading Topic 2

Year 2, Semester 2 (July to October)

PCN222	Advanced Lighting Design
PCN223	Lighting Applications
PCN320	Lighting Project

Course structure - Part-time

Year 1, Semester 2 (July to October)

PCN121	Vision Colour and Photometry
PCN124	Lamps and Luminaires

Year 2, Semester 1 (February to June)

PCN122	Lighting Design
PCN123	Sustainability and Human Factors

Year 2, Semester 2 (July to October)

PCN223	Lighting Applications
	Elective - One unit from:
PCN222	Advanced Lighting Design
PCN224	Applied Lighting

Year 3, Semester 1 (February to June)

PCN221	Best Practices in Lighting
	Elective - One unit from:
CNP520	Project Management
PCN224	Applied Lighting

Year 3, Semester 2* (July to October)

PCN321	Reading Topic 1
	or approved elective
PCN322	Reading Topic 2
	or approved elective

Year 4, Semester 1* (February to June)

PCN320	Lighting Project

* The Fifth and Sixth semesters can be taken concurrently in full-time mode.

PH82 is offered full-time internally and part-time internally and externally. The course comprises a lecture/tutorial format, and where

appropriate practical and field work. Some units will have a significant computer-design type component and all units will incorporate learning through assignment work, all of which will be incorporated into the assessment program. Most units in the internal mode will be offered in block format on evenings and weekends. Students enrolling in the external mode will be required to attend QUT for 4 to 5 days per semester for intensive practical and tutorial work.

Students in the Master of Lighting (PH82) wishing to exit with the Graduate Certificate in Lighting (PH62) or Graduate Diploma in Lighting (PH72) are required to submit an Application to Graduate Early with an Approved Exit Course (SRX) Form in their final semester of study.

International students wishing to change courses should consult International Student Business Services.

Potential Careers:

Architect , Electrical Contractor, Electrical Engineer, Energy Consultant, Industrial Designer, Landscape Architect, Lighting Designer, Lighting Technician, Luminaire Designer, Physicist, Sales Person, Scientist, Theatre Lighting.

Master of Lighting (off-shore) (PH83)

Year offered: 2009
Admissions: Yes
Course duration (external): 3 semesters (1 year) full-time and 6 semesters (2 years) part-time (Hong Kong)
Domestic fees (per credit point): Off-shore course *(subject to annual review)*
International Entry: September
Total credit points: 144
Standard credit points per part-time semester: 24
Course coordinator: Associate Professor Ian Cowling
Campus: City University of Hong Kong

Overview

The Master of Lighting (PH83) is designed primarily for people working in all areas of the lighting industry and engineers or architects whose work includes some aspects of lighting. It provides the opportunity for graduates of the Graduate Certificate in Lighting (PH63) and the Graduate Diploma in Lighting (PH73) to undertake a Masters in the form of a project with some coursework.

Entry Requirements

(a) Bachelor level degree in an appropriate field

OR

(b) Successful completion of the PH72/PH73 Graduate Diploma in Lighting or equivalent.

Note: Students with relevant experience in the lighting industry or recognised educational qualifications in lighting may be granted credit to a maximum of 36 credit points.

Course Design

Masters students will undertake a 24 credit point research project, which may be based within their place of employment and two units (24 credit points) of coursework which may be reading topics associated with their project or other electives taken from any relevant units within the University, on approval of the Course Coordinator.

Contact Details
Course Coordinator

Associate Professor Ian Cowling
Phone: +61 7 3138 2592
Email: i.cowling@qut.edu.au

Course structure - Part-time

First Semester (September to December)	
PCZ121	Vision Colour and Photometry
PCZ124	Lamps and Luminaires

Second Semester (January to April)	
PCZ122	Lighting Design
PCZ123	Sustainability and Human Factors

Third Semester (May to August)	

PCZ222	Advanced Lighting Design
PCZ223	Lighting Applications

Fourth Semester (September to December)	
PCZ221	Best Practices in Lighting
PCZ224	Applied Lighting

Fifth Semester (January to April)	
PCZ321	Reading Topic 1
	Or approved elective
PCZ322	Reading Topic 2
	Or approved elective

Sixth Semester (May to August)	
PCZ320	Lighting Project

NOTE: PH83 will be offered part-time in a combination of face-to-face lecture/tutorial/practical format, and on-line. Some units will have a computer-design type component and all units will incorporate learning through assignment work, all of which will be incorporated into the assessment program. For the first three semesters the two units offered each semester will be presented sequentially. The face-to-face teaching component will be offered in block form over a weekend, usually on the first weekend of the teaching period assigned to that unit. There will then be a follow-up face-to-face session about three weekends later. For the fourth and fifth semesters both units will commence together at the start of the semester.

Students in the Master of Lighting (PH83) wishing to exit with the Graduate Certificate in Lighting (PH63) or Graduate Diploma in Lighting (PH73) are required to submit an Application to Graduate Early with an Approved Exit Course (SRX) Form in their final semester of study.

Potential Careers:

Architect , Electrical Contractor, Electrical Engineer, Energy Consultant, Industrial Designer, Landscape Architect, Lighting Designer, Lighting Technician, Luminaire Designer, Physicist, Sales Person, Scientist, Theatre Lighting.

Master of Cardiac Ultrasound (PH85)

Year offered: 2009
Admissions: Yes
Course duration (part-time): 6 semesters (3 years) (External only)
Domestic fees (indicative): 2009: Full fee tuition $6,750 (indicative) per semester
Domestic Entry: February: Early Closing Date - 1 December 2008. Early closing date for PH75 and PH85 Semester 1 2009 entry, pending quota being filled. Beyond this date, late applicants should contact the course coordinator for admission advice. Stage 1 of this course commences in February and July (students with advanced standing). Stage 2 commences in February and July.
Total credit points: 144
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Bonita Anderson
Campus: Gardens Point

Entry Requirements

To be eligible to enrol an applicant will normally have a degree or diploma level qualification in a relevant science or allied health field, and access to suitable clinical experience for the duration of the course.

Students who do not meet the normal entry requirements may be permitted to enrol subject to the approval of the Head of the School of Physical and Chemical Sciences. Applicants should submit as much detail as possible about previous studies and prior learning experiences that may be relevant. In some cases a bridging program may be required.

Second semester enrolments for PH85 will only be accepted under the following circumstances:

1. Students who have successfully completed PH75 Graduate Diploma in Cardiac Ultrasound may enrol into the Masters project (PCN640-1) in second semester.

2. Students who have completed the Cardiac DMU and who are eligible to apply for advanced standing may enrol into PH85 in second semester*.

* Under university rules and regulations, these students are required to undertake 50% of the coursework for PH85. Therefore, in addition to the Masters project, students will be required to complete two other units (PCN218 Research Methodology and Professional Studies and PCN459 Advanced Cardiac Ultrasound).

Fees: Please note that the Domestic Fees are based on full-time studies. This course is a part-time course. Please refer to Indicative Domestic Fees (http://www.studentservices.qut.edu.au/costs/calculate/indicative.jsp) for information.

Professional Recognition

This course is accredited with the Australasian Sonographer Accreditation Registry (ASAR).

Course Design

This course consists of two stages. Stage 1 (Graduate Diploma in Cardiac Ultrasound - PH75) takes two years of part-time study to complete. Students must be employed in a suitable clinical practice with adequate access to clinical cardiac ultrasound experience for the duration of the course. If students are not based in Brisbane, this structure allows attendance by offering the formal classroom component in an intensive one-week block in each semester.

Stage 2 (Master of Cardiac Ultrasound - PH85) involves the completion of a research project and submission of a thesis. Students undertake this project externally under QUT staff supervision and the guidance of a suitable external supervisor. This stage would normally take one year part-time to complete.

Overview

The Master of Cardiac Ultrasound program offers studies for practicing Cardiac Sonographers. The course is conducted using a combination of block classes of approximately one week's duration in each semester, web-based modules and clinical practice modules.

Contact Details

Course Coordinator
Bonita Anderson
Phone: +61 7 3138 2585
Email: b.anderson@qut.edu.au

Course structure

STAGE 1: Students must complete the units listed below, totalling 96 credit points:

Year 1, Semester 1

PCN155	Cardiac Ultrasound 1
PCN162	Principles of Medical Ultrasound
PCN497-1	Clinical Attachment 4

Year 1, Semester 2

PCN259	Cardiac Ultrasound 2
PCN497-2	Clinical Attachment 4

Year 2, Semester 1

PCN218	Research Methodology and Professional Studies
PCN359	Cardiac Ultrasound 3
PCN597-1	Clinical Attachment 5

Semester 2, Semester 2

PCN459	Advanced Cardiac Ultrasound
PCN597-2	Clinical Attachment 5
NOTE:	The PCN497 and PCN597 clinical attachment units are 2 semester units.

STAGE 2:* Students must complete the units listed below, totalling 48 credit points:

First Semester ** (Project Over Two Semesters)

PCN640-1 Project

PCN640-2 Project

Notes: A student may request an extension of time in which to submit the project report for assessment. A request for an extension of time up to a maximum of six months should be made in writing through the Head of School to the Dean. Any request for a further extension, or any request for an extension to a date later than six months after the original due date, should be made to the Academic Board. The Academic Board may grant the extension under such conditions as it may consider appropriate, or may award the student a "Fail" result in the project unit.

A student who has received a 'Fail' result in the project unit may re-enrol in the unit only in exceptional circumstances and with the express permission of the Academic Board.

* Masters project units are offered in both semesters.

** Second Semester enrolments for PH85 will only be accepted under the following circumstances:

1. Students who have successfully completed PH75 Graduate Diploma in Cardiac Ultrasound may enrol into the Masters project (PCN640-1) in second semester.

2. Students who have completed the Cardiac DMU and who are eligible to apply for advanced standing may enrol into PH85 in second semester.#

Under university rules and regulations, these students are required to undertake 50% of the coursework for PH85. Therefore, in addition to the Masters project, students will be required to complete two other units (PCN218 Research Methodology and Professional Studies and PCN459 Advanced Cardiac Ultrasound).

Students in the Master of Cardiac Ultrasound (PH85) wishing to exit with the Graduate Diploma in Cardiac Ultrasound (PH75) are required to submit an Application to Graduate Early with an Approved Exit Course (SRX) Form in their final semester of study.

Potential Careers:

Sonographer.

Accelerated Foundation (QC01)

Year offered: 2009
Admissions: Yes
CRICOS code: 065046D
Course duration (full-time): 1 semester
International Fees (per semester): 2009: $7,210 per semester *(subject to annual review)*
International Entry: February, June and October
Total credit points: 60
Course coordinator: Scott Leisemann
Campus: Kelvin Grove

Entry Requirements- Academic

Successful completion of senior high school with the required grades.
Students who have attempted further schooling studies, eg GCE A-levels or equivalent may be considered for entry. Applications will be reviewed individually and applicants will need to meet subject prerequisites. Students can find more country specific entry requirements at the following web site.
http://www.international.qut.edu.au/apply/howtoapply/entryreqs/academic.jsp

Entry Requirements - English Language

IELTS 6.0 with no sub-score less than 5.0 or TOEFL iBT Overall score of 80 (at least 18 in all bands) or TOEFL 550 (paper) or TOEFL 213 (CBT) or equivalent, or successful completion of the EAP program. (N.B. Students should also check visa requirements).

Description

The Foundation Program, which has intakes in February, June and October, provides pathways to QUT award programs (Diploma or Degree). Graduates enjoy a high placement rate in undergraduate courses at QUT and other Australian universities. Successful completion guarantees a place in the first year of the relevant program in all QUT faculties. Small classes and dedicated staff provide an excellent learning environment while additional support is provided by Language and Welfare Advisers. Some students may need intensive English language preparation at the College's English Language Programs prior to entering a Foundation Program.

Course completion

Students are required to gain **at least** a grade of 4 (Pass) in foall units.

Progression

Conditions of progressing to a guaranteed place in first year of a QUT degree :

i) fulfil the Foundation course requirements,
ii) gain a grade of at least 5 (Credit) in Academic English 2 (QCF212) [Built Environment and Engineering students require a grade of 4 (Pass) and SC45 Bachelor of Pharmacy and PH38 Bachelor of Applied Science â Medical Radiation Technology (Medical Imaging Technology) students require a grade of 6 (Distinction)], and
iii) achieve the relevant faculty Grade Point Average (GPA) - this is calculated on final semester Level 2 units only.

Students who do not meet requirements for a guaranteed place in either a QUT degree or University Diploma Program, may still be considered for entry by the relevant faculty.

Required Foundation Grade Point Average by Faculty

Built Environment - Required GPA 4.6
Business - Required GPA 4.8
Creative Industries - Required GPA 4.4
Education - Required GPA 4.6
Engineering - Required GPA 4.6
Health - Human Services - Required GPA 4.2
Health (except Nutrition & Dietetics, Optometry, Psychology, Podiatry & Human Services) - Required GPA 4.6
Health - Nutrition & Dietetics - Required GPA 5.8
Health - Optometry - Required GPA 5.8
Health - Podiatry - Required GPA 5.8
Health - Psychology - Required GPA 5.0
Law (except Justice Studies) - Required GPA 4.8
Law - Justice Studies - Required GPA 4.2
Science & Technology (except IT, Pharmacy & Medical Imaging Technology) - Required GPA 4.6
Science & Technology - Information Technology - Required GPA 4.8
Science & Technology - Pharmacy & Medical Imaging Technology - Required GPA 5.8

N.B. Grades in each unit are awarded on a scale from 1 to 7, with 7 being the highest.

QC01 - Foundation Program (Full Time course structure)

Semester One	
QCF211	Tertiary Preparation Studies 2
QCF212	Academic English 2
QCF256	Mathematics A2
	OR
QCF257	Mathematics B2
	OR
QCF260	Professional Studies
	+ TWO ELECTIVES from the following list
QCF122	Organisations And Management
QCF160	Introduction to Creativity
QCF220	Accounting 2
QCF221	Economics 2
QCF254	Physics
QCF255	Chemistry
QCF230	Information Processing
QCF252	Life Science
QCF270	International Perspectives
	null
	Note: In some semesters some elective units may not be offered if there is insufficient demand.

Potential Careers:

Academic, Account Executive, Accountant, Actor, Actuary, Administrator, Adult/Workplace Educator, Advertising Professional, Aerospace Avionics Engineer, Aged Services Worker, Analytical Chemist, Animator, Architect , Art Project Manager, Art Writer, Artist, Arts Administrator, Astrophysicist, Band Leader, Banker, Banking and Finance Professional, Barrister, Biochemist, Bioengineer, Bioinformatician, Biologist, Biomechanical Engineer, Biomedical Engineer, Biotechnologist, Business Analyst, Certified Practicing Accountant, Chemical Technologist, Chemist, Chemist Industrial, Child Care Professional, Child Protection Officer, Choreographer, Civil Engineer, Clinical Laboratory Scientist, Coastal Scientist, Community Corrections Officer, Community Education Officer, Community Health Officer, Community Worker, Composer, Computer Games Developer, Computer Salesperson/Marketer, Computer Systems Engineer, Conductor, Conservation Biologist, Construction Manager, Contract Administrator, Corporate Secretary, Corrective Services Officer, Counsellor, Creative Writer, Crown Law Officer, Curator, Customs Officer, D.J, Dance Teacher, Dancer, Data Communications Specialist, Database Manager, Digital Composer, Diplomat, Disability Services Worker, Drama Teacher, Early Childhood Teacher, Ecologist, Economist, Educator, Electrical and Computer Engineer, Electrical Engineer, Electronic Commerce Developer, Engineering Technologist, English Teacher, Environmental Engineer, Environmental Health Officer, Environmental Scientist, Estimator, Exchange Student, Exercise Physiologist, Facilities Manager, Family Services Officer, Fashion Designer, Fashion Professional, Film Composer, Film/Television Producer, Financial Advisor/Analyst, Financial Project Manager, Fitness Assessor/Personal Trainer, Forensic Scientist, Funds Manager, Geologist, Geophysicist, Geoscientist, Government Officer, Guidance Officer, Health Information Manager, Health Physicist, Health Services Manager, Higher Education Worker, Home Economist, Human Resource Developer, Human Resource Manager, Human Services Practitioner, Hydrogeologist, Immunologist, In-House Lawyer, Industrial Chemist, Industrial Designer, Information Officer, Information Security Specialist, Instrument Maker, Interior Designer, International Business Specialist, Internet Professional, Investigator, Investment Manager, Journalist, Kindergarten Teacher, Laboratory Technician (Chemistry), Landscape Architect, Librarian, Manager, Manufacturer, Mapping Scientist/Photogrammetrist, Marine Scientist, Marketing Officer/Manager, Mastering Engineer, Mathematician, Mechanical Engineer, Media Industry Specialist, Medical Biotechnologist, Medical Engineer, Medical Equipment Sales, Medical Imaging Technologist, Medical Physicist, Medical Scientist, Microbiologist, Molecular Biologist, Multimedia Designer, Music Agent/Manager, Music Publisher, Music Sampler, Music Teacher, Music Technologist, Musical Director, Musician, Natural Resource Scientist, Network Administrator, Network Manager, Nurse, Nutritionist/Dietitian, Occupational Health and Safety Officer, Optometrist, Organisational Communication Specialist, Pathology Scientist, Physicist, Plant Biotechnologist, Podiatrist, Police Officer (Australian Federal), Police Officer (State), Policy Officer, Population Ecologist, Preschool Teacher, Primary School Teacher, Programmer, Project Developer, Project Manager, Property Economist, Psychologist, Public Health Officer, Public Relations Officer/Consultant, Public Servant, Publishing Professional, Quantitative Analyst, Quantity Surveyor, Radiation Therapist, Radiographer, Recording Engineer, Rehabilitation Engineer, Rehabilitation Professionals, Risk Manager, School Counsellor, Secondary School Teacher, Social Scientist, Sociologist, Software Engineer, Solicitor, Song Writer, Sonographer, Sound and Music Producer, Sound Designer, Sound/Audio Engineer, Sports Scientist, Stage Manager, Statistician, Stockbroker, Surveyor, Systems Analyst, Systems Manager, Systems Programmer, Systems Trainer, TAFE Teacher, Teacher, Technical Officer, TESOL Teacher, Theatre Professionals, Trainer, Translator, Urban and Regional Planner, Urban Designer, Virologist, Visual Artist, Visual Arts Teacher, Web Designer, Youth Worker.

Standard Foundation (QC02)

Year offered: 2009
Admissions: Yes
CRICOS code: 065045E
Course duration (full-time): 2 semesters
International Fees (per semester): 2009: $7,210 per semester *(subject to annual review)*
International Entry: February, June and October
Total credit points: 120
Standard credit points per full-time semester: 60
Course coordinator: Scott Leisemann
Campus: Kelvin Grove

Entry Requirements-Academic

Successful completion of senior high school with the required grades or successful completion of year 11 high school with very good grades. Students can find country specific entry requirements at the following web site. http://www.international.qut.edu.au/apply/howtoapply/entryreqs/academic.jsp

Entry Requirements - English Language

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

Description

The Foundation Program, which has intakes in February, June and October, provides pathways to QUT award programs (Diploma or Degree). Graduates enjoy a high placement rate in undergraduate courses at QUT and other Australian universities. Successful completion guarantees a place in the first year of the relevant program in all QUT faculties. Small classes and dedicated staff provide an excellent learning environment while additional support is provided by Language and Welfare Advisers. Some students may need intensive English language preparation at the College's English Language Programs prior to entering a Foundation Program.

Students who achieve excellent results in the first semester may have the opportunity to study up to two University Diploma units in their final semester for possible credit towards their degree course.

Course Completion

In order to complete course requirements, students must gain **at least** a grade of 4 (Pass) in all units.

Required Foundation Grade Point Average by Faculty

Built Environment - Required GPA 4.6
Business - Required GPA 4.8
Creative Industries - Required GPA 4.4
Education - Required GPA 4.6
Engineering - Required GPA 4.6
Health - Human Services - Required GPA 4.2
Health (except Nutrition & Dietetics, Optometry, Psychology, Podiatry & Human Services) - Required GPA 4.6
Health - Nutrition & Dietetics - Required GPA 5.8
Health - Optometry - Required GPA 5.8
Health - Podiatry - Required GPA 5.8
Health - Psychology - Required GPA 5.0
Law (except Justice Studies) - Required GPA 4.8
Law - Justice Studies - Required GPA 4.2
Science & Technology (except IT, Pharmacy & Medical Imaging Technology) - Required GPA 4.6
Science & Technology - Information Technology - Required GPA 4.8
Science & Technology - Pharmacy & Medical Imaging Technology - Required GPA 5.8

N.B. Grades in each unit are awarded on a scale from 1 to 7, with 7 being the highest.

Progression

Conditions of progressing to a guaranteed place in first year of a QUT degree :

i) fulfil the Foundation course requirements,
ii) gain a grade of at least 5 (Credit) in Academic English 2 (QCF212) [Built Environment and Engineering students require a grade of 4 (Pass) and SC45 Bachelor of Pharmacy and PH38 Bachelor of Applied Science â Medical Radiation Technology (Medical Imaging Technology) students require a grade of 6 (Distinction)], and
iii) achieve the relevant faculty Grade Point Average (GPA) - this is calculated on final semester Level 2 units only.

Students who do not meet requirements for a guaranteed place in either a QUT degree or University Diploma Program, may still be considered for entry by the relevant faculty.

QC02 - Foundation Program

Semester One	
QCF111	Tertiary Preparation Studies 1
QCF112	Academic English 1
QCF156	Mathematics A1
	OR
QCF157	Mathematics B1
	+ TWO ELECTIVES from the following list
QCF115	Foundation English
QCF120	Accounting 1
QCF121	Economics 1
QCF122	Organisations And Management
QCF153	Physical Sciences 1
QCF160	Introduction to Creativity
QCF252	Life Science
	null
	Note: There is no computing component in QCF115 for 13TP2 & 13TP3.
	Note: In some semesters some elective units may not be offered if there is insufficient demand.

Semester Two	
QCF211	Tertiary Preparation Studies 2
QCF212	Academic English 2
QCF256	Mathematics A2
	OR
QCF257	Mathematics B2
	OR
QCF260	Professional Studies
	+TWO ELECTIVES from the following list
QCF122	Organisations And Management
QCF160	Introduction to Creativity
QCF220	Accounting 2
QCF221	Economics 2
QCF254	Physics
QCF255	Chemistry
QCF230	Information Processing
QCF252	Life Science
QCF270	International Perspectives
	null

Approved diploma units (Business, IT or Creative Industries students only). Diploma units can only be taken under special circumstances and with the approval of the Course Coordinator.

Note: In some semesters some elective units may not be offered if there is insufficient demand.

Potential Careers:

Academic, Account Executive, Accountant, Actor, Actuary, Administrator, Adult/Workplace Educator, Advertising Professional, Aerospace Avionics Engineer, Aged Services Worker, Analytical Chemist, Animator, Architect , Art Project Manager, Art Writer, Artist, Arts Administrator, Astrophysicist, Band Leader, Banker, Banking and Finance Professional, Barrister, Biochemist, Bioengineer, Bioinformatician, Biologist, Biomechanical Engineer, Biomedical Engineer, Biotechnologist, Biotechnologist, Business Analyst, Cell Biologist, Certified Practicing Accountant, Chemical Technologist, Chemist, Chemist Industrial, Child Care Professional, Child Protection Officer, Choreographer, Civil Engineer, Clinical Laboratory Scientist, Coastal Scientist, Community Corrections Officer, Community Education Officer, Community Health Officer, Community Worker, Composer, Computer Game Programmer, Computer Games Developer, Computer Salesperson/Marketer, Computer Systems Engineer, Conductor, Conservation Biologist, Construction Manager, Contract Administrator, Corporate Secretary, Corrective Services Officer, Counsellor, Creative Writer, Crown Law Officer, Curator, Customs Officer, D.J, Dance Teacher, Dancer, Data Communications Specialist, Database Manager, Digital Composer, Diplomat, Disability Services Worker, Drama Teacher, Early Childhood Teacher, Ecologist, Economist, Educator, Electrical and Computer Engineer, Electrical Contractor, Electrical Engineer, Electronic Commerce Developer, Engineering Technologist, English Teacher, Environmental Engineer, Environmental Health Officer, Environmental Scientist, Estimator, Exchange Student, Exercise Physiologist, Exploration Geologist, Facilities Manager, Family Services Officer, Fashion Designer, Fashion Professional, Film Composer, Film/Television Producer, Financial Advisor/Analyst, Financial Project Manager, Fitness Assessor/Personal Trainer, Forensic Biologist, Forensic Chemist, Forensic Scientist, Funds Manager, Geologist, Geophysicist, Geoscientist, Government Officer, Guidance Officer, Health Information Manager, Health Physicist, Health Services Manager, Higher Education Worker, Home Economist, Human Resource Developer, Human Resource Manager, Human Services Practitioner, Hydrogeologist, Immunologist, In-House Lawyer, Industrial Chemist, Industrial Designer, Information Officer, Information Security Specialist, Instrument Maker, Interior Designer, International Business Specialist, Internet Professional, Investigator, Investment Manager, Journalist, Kindergarten Teacher, Laboratory Technician (Chemistry), Landscape Architect, Librarian, Lighting Designer, Lighting Technician, Luminaire Designer, Manager, Manufacturer, Mapping Scientist/Photogrammetrist, Marine Scientist, Market Research Manager, Marketing Officer/Manager, Mastering Engineer, Mathematician, Mechanical Engineer, Media Industry Specialist, Medical Biotechnologist, Medical Engineer, Medical Equipment Sales, Medical Imaging Technologist, Medical Physicist, Medical Scientist, Microbiologist, Mine Geologist, Molecular Biologist, Multimedia Designer, Music Agent/Manager, Music Publisher, Music Sampler, Music Teacher, Music Technologist, Musical Director, Musician, Natural Resource Scientist, Network Administrator, Network Manager, Nurse, Nutritionist/Dietitian, Occupational Health and Safety Officer, Operations Manager, Optometrist, Organisational Communication Specialist, Pathology Scientist, Pharmaceutical Research Scientist, Physicist, Plant Biotechnologist, Podiatrist, Police Officer (Australian Federal), Police Officer (State), Policy Officer, Population Ecologist, Post-production specialist, Preschool Teacher, Primary School Teacher, Programmer, Project Developer, Project Manager, Property Development, Property Economist, Property Management, Psychologist, Public Health Officer, Public Relations Officer/Consultant, Public Servant, Publishing Professional, Quantitative Analyst, Quantity Surveyor, Radiation Therapist, Radiographer, Recording Engineer, Rehabilitation Engineer, Rehabilitation Professionals, Research and Development Chemist, Risk Manager, Sales Person, School Counsellor, Secondary School Teacher, Social Scientist, Sociologist, Software Engineer, Solicitor, Song Writer, Sonographer, Sound and Music Producer, Sound Designer, Sound/Audio Engineer, Sports Scientist, Stage Manager, Statistician, Stockbroker, Surveyor, Systems Analyst, Systems Manager, Systems Programmer, Systems Trainer, TAFE Teacher, Teacher, Technical Officer, TESOL Teacher, Theatre Lighting, Theatre Professionals, Trainer, Translator, Urban and Regional Planner, Urban Designer, Virologist, Visual Artist, Visual Arts Teacher, Web Designer, Youth Worker.

Extended Foundation (QC04)

Year offered: 2009
Admissions: Yes
CRICOS code: 050167G
Course duration (full-time): 3 Semesters
International Fees (per semester): 2009: $15,862 (full course fee) *(subject to annual review)*
International Entry: February
Total credit points: 132
Standard credit points per full-time semester: 13TP1 - 48CP, 13TP2 - 60CP, 13TP3 - 24CP
Course coordinator: Scott Leisemann
Campus: Kelvin Grove

Entry Requirements - Academic

Successful completion of senior high school with the required grades or successful completion of year 11 high school with very good grades. Students can find country specific entry requirements at the following web site. http://www.international.qut.edu.au/apply/howtoapply/entryreqs/academic.jsp

Entry Requirements - English Language

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

Description

The Extended Foundation Program (QC04), which has an intake in February, provides pathways to QUT award programs (Diploma or Degree). This pathway is designed for students who require additional support with language and adjustment to the Australian educational environment. Successful completion guarantees a place in the first year of the relevant program in all QUT faculties. Small classes and dedicated staff provide an excellent learning environment while additional support is provided by Language and Welfare Advisers.

Students who achieve excellent results in the first semester may have the opportunity to study up to two University Diploma units in their second semester for credit towards their degree course.

Course Completion

In order to complete the course requirements, students must gain **at least** a grade of 4 (Pass) in all units.

Progression

Conditions of progressing to a guaranteed place in first year of a QUT degree :

i) fulfil the Foundation course requirements,
ii) gain a grade of at least 5 (Credit) in Academic English 2 (QCF212) [Built Environment and Engineering students require a grade of 4 (Pass) and SC45 Bachelor of Pharmacy and PH38 Bachelor of Applied Science â Medical Radiation Technology (Medical Imaging Technology)

students require a grade of 6 (Distinction)], and
iii) achieve the relevant faculty Grade Point Average (GPA) - this is calculated on final semester Level 2 units only.

Students who do not meet requirements for a guaranteed place in either a QUT degree or University Diploma Program, may still be considered for entry by the relevant faculty.

Required Foundation Grade Point Average by Faculty

Built Environment - Required GPA 4.6
Business - Required GPA 4.8
Creative Industries - Required GPA 4.4
Education - Required GPA 4.6
Engineering - Required GPA 4.6
Health - Human Services - Required GPA 4.2
Health (except Nutrition & Dietetics, Optometry, Psychology, Podiatry & Human Services) - Required GPA 4.6
Health - Nutrition & Dietetics - Required GPA 5.8
Health - Optometry - Required GPA 5.8
Health - Podiatry - Required GPA 5.8
Health - Psychology - Required GPA 5.0
Law (except Justice Studies) - Required GPA 4.8
Law - Justice Studies - Required GPA 4.2
Science & Technology (except IT, Pharmacy & Medical Imaging Technology) - Required GPA 4.6
Science & Technology - Information Technology - Required GPA 4.8
Science & Technology - Pharmacy & Medical Imaging Technology - Required GPA 5.8

N.B. Grades in each unit are awarded on a scale from 1 to 7, with 7 being the highest.

QC04 - Extended Foundation Program

Semester One	
QCF115	Foundation English
QCF156	Mathematics A1
	OR
QCF157	Mathematics B1
	+ TWO ELECTIVES from the following list
QCF120	Accounting 1
QCF121	Economics 1
QCF153	Physical Sciences 1
QCF122	Organisations And Management
QCF252	Life Science
	null
	null
	Note: There is no computing component in QCF115 for 13TP2 & 13TP3.
	Note: In some semesters some elective units may not be offered if there is insufficient demand.

Semester Two	
QCF111	Tertiary Preparation Studies 1
QCF112	Academic English 1

QCF256	Mathematics A2
	OR
QCF257	Mathematics B2
	OR
QCF260	Professional Studies
	+ TWO ELECTIVES from the following list
QCF122	Organisations And Management
QCF160	Introduction to Creativity
QCF220	Accounting 2
QCF221	Economics 2
QCF230	Information Processing
QCF254	Physics
QCF255	Chemistry
QCF270	International Perspectives

Approved diploma units (Business, IT or Professional Communication students only). Diploma units can only be taken under special circumstances and with the approval of the Course Coordinator.

Note: In some semesters some elective units may not be offered if there is insufficient demand.

null

Semester Three (8 Week Teaching Period)

QCF211	Tertiary Preparation Studies 2
QCF212	Academic English 2

Note: In this semester students focus on the higher level tertiary preparation and communication skills and attend 18 hours of study per week in their classes over a 8 week teaching period.

Potential Careers:

Academic, Account Executive, Accountant, Actor, Actuary, Administrator, Adult/Workplace Educator, Advertising Professional, Aerospace Avionics Engineer, Aged Services Worker, Analytical Chemist, Animator, Architect , Art Project Manager, Art Writer, Artist, Arts Administrator, Astrophysicist, Band Leader, Banker, Banking and Finance Professional, Barrister, Biochemist, Bioengineer, Bioinformatician, Biologist, Biomechanical Engineer, Biomedical Engineer, Biotechnologist, Biotechnologist, Business Analyst, Cell Biologist, Certified Practicing Accountant, Chemical Technologist, Chemist, Chemist Industrial, Child Care Professional, Child Protection Officer, Choreographer, Civil Engineer, Clinical Laboratory Scientist, Coastal Scientist, Community Corrections Officer, Community Education Officer, Community Health Officer, Community Worker, Composer, Computer Game Programmer, Computer Games Developer, Computer Salesperson/Marketer, Computer Systems Engineer, Conductor, Conservation Biologist, Construction Manager, Contract Administrator, Corporate Secretary, Corrective Services Officer, Counsellor, Creative Writer, Crown Law Officer, Curator, Customs Officer, D.J, Dance Teacher, Dancer, Data Communications Specialist, Database Manager, Digital Composer, Diplomat, Disability Services Worker, Drama Teacher, Early Childhood Teacher, Ecologist, Economist, Educator, Electrical and Computer Engineer, Electrical Contractor, Electrical Engineer, Electronic Commerce Developer, Engineering Technologist, English Teacher, Environmental Engineer, Environmental Health Officer, Environmental Scientist, Estimator, Exchange Student, Exercise Physiologist, Exploration Geologist, Facilities Manager, Family Services Officer, Fashion Designer, Fashion Professional, Film Composer, Film/Television Producer, Financial Advisor/Analyst, Financial Project Manager, Fitness Assessor/Personal Trainer, Forensic Biologist, Forensic Chemist, Forensic Scientist, Funds Manager, Geologist, Geophysicist, Geoscientist, Government Officer, Guidance Officer, Health Information Manager, Health Physicist, Health Services Manager, Higher Education Worker, Home Economist, Human Resource Developer, Human Resource Manager, Human Services Practitioner, Hydrogeologist, Immunologist, In-House Lawyer, Industrial Chemist, Industrial Designer, Information Officer, Information Security Specialist, Instrument Maker, Interior Designer, International Business Specialist, Internet Professional, Investigator, Investment Manager, Journalist, Kindergarten Teacher, Laboratory Technician (Chemistry), Landscape Architect, Librarian, Manager, Manufacturer, Mapping Scientist/Photogrammetrist, Marine Scientist, Market Research Manager, Marketing Officer/Manager, Mastering Engineer, Mathematician, Mechanical Engineer, Media Industry Specialist, Medical Biotechnologist, Medical Engineer, Medical Equipment Sales, Medical Imaging Technologist, Medical Physicist, Medical Scientist, Microbiologist, Molecular Biologist, Multimedia Designer, Music Agent/Manager, Music Publisher, Music Sampler, Music Teacher, Music Technologist, Musical Director, Musician, Natural Resource Scientist, Network Administrator, Network Manager, Nurse, Nutritionist/Dietitian, Occupational Health and Safety Officer, Optometrist, Organisational Communication Specialist, Pathology Scientist, Pharmaceutical Research Scientist, Physicist, Plant Biotechnologist, Podiatrist, Police Officer (Australian Federal), Police Officer (State), Policy Officer, Population Ecologist, Post-production specialist, Preschool Teacher, Primary School Teacher, Programmer, Project Manager, Property Development, Property Economist, Psychologist, Public Health Officer, Public Relations Officer/Consultant, Public Servant, Publishing Professional, Quantitative Analyst, Quantity Surveyor, Radiation Therapist, Radiographer, Recording Engineer, Rehabilitation Engineer, Rehabilitation Professionals, Research and Development Chemist, Risk Manager, Sales Person, School Counsellor, Scientist, Secondary School Teacher, Social Scientist, Sociologist, Software Engineer, Solicitor, Song Writer, Sonographer, Sound and Music Producer, Sound Designer, Sound/Audio Engineer, Sports Scientist, Stage Manager, Statistician, Stockbroker, Surveyor, Systems Analyst, Systems Manager, Systems Programmer, Systems Trainer, TAFE Teacher, Teacher, Technical Officer, TESOL Teacher, Theatre Lighting, Theatre Professionals, Trainer, Translator, Urban and Regional Planner, Urban Designer, Virologist, Visual Artist, Visual Arts Teacher, Web Designer, Youth Worker.

University Certificate In Tertiary Preparation (QC05)

Year offered: 2009
Admissions: Yes
CRICOS code: 065044F
Course duration (full-time): 1 semester
International Fees (per semester): 2009: $7,210 per semester *(subject to annual review)*
International Entry: February, July and October
Total credit points: 48
Standard credit points per full-time semester: 48
Course coordinator: Scott Leisemann
Campus: Kelvin Grove

Entry Requirements - Academic

Students must have met the academic entry requirements for their proposed postgraduate or undergraduate course.

Entry Requirements- English Language

IELTS 6.0 with no sub-score less than 5.0 or TOEFL iBT Overall score of 80 (at least 18 in all bands) or TOEFL 550 (paper) or TOEFL 213 (CBT) or equivalent, or successful completion of the EAP program (N.B. Students should also check visa requirements).

Description

The University Certificate in Tertiary Preparation is a one-semester program that enables students to receive a University certificate on successful completion. It is designed for students who may have already met the academic entry requirements for a QUT undergraduate or postgraduate degree, but who may not have met the English language and/or prerequisite requirements.*

This program provides two alternative streams:

Stream A is designed for students who have not met English and/or prerequisite requirements for their chosen undergraduate or postgraduate course. Most students may undertake one degree unit (for credit) whilst enrolled in the University Certificate in Tertiary Preparation program. Those with advance standing may be able to undertake two Faculty unit.

Stream B is for students who have met English requirements but not prerequisite requirement for their degree, or who may wish to improve the standard of their academic English. These students may take one or two degree units (for credit) whilst enrolled in the University Certificate in Tertiary Preparation Program.

Both streams include intensive preparation for academic language, lateral thinking, research and presentation skills required for successful tertiary study. Small classes and dedicated staff ensure an excellent learning environment. Additional support is provided by Language and Welfare Advisers.

Alternatively, there may be some students who have already met both the academic and English requirements for a QUT degree entry, but who would prefer to undertake the University Certificate in Tertiary Preparation in order to prepare for academic study in a different tertiary environment.

*Students who require a Student Visa should check the English language requirements for a student visa from their country of origin.

Course Completion

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

Progression

In order to progress to an award course, students must:

i) fulfil the University Certificate in Tertiary Preparation course requirements
ii) gain a minimum grade of 4 (Pass) in Communication 2 or an IELTS 6.5 or equivalent,
iii) meet any other conditions detailed in the 'letter of offer' from Student Business Services.

QC05 - University Certificate in Tertiary Preparation

Stream A (for those with IELTS 6.0)	
QCD111	Communication 1
QCD211	Communication 2
QCS230	Computing
	DEGREE UNIT
	Undergraduate students will need to enrol in the units QCD110 and QCD210

Stream B (for those with IELTS 6.5)	
QCD111	Communication 1
QCD211	Communication 2
	DEGREE UNIT one
	DEGREE UNIT two
	Undergraduate students will need to enrol in the units QCD110 and QCD210

English for Academic Purposes for degree programs (QC10)

Year offered: 2009
Admissions: Yes
CRICOS code: 011424G
Course duration (full-time): 12 weeks
International Fees (per semester): 2009: $3,960 per semester *(subject to annual review)*
International Entry: March, July and October (dates are designed to allow entry to selected semester of next course)
Total credit points: 48
Course coordinator: John Healy
Campus: Kelvin Grove

Entry Requirements - Academic

To be eligible for entry, applicants must either:

1. Have an offer of a place in a QUT degree program and successfully complete the relevant EAP entry test; or

2. Degree Entry (IELTS 6.5) - Produce original documentary evidence of an IELTS score with an overall minimum of 5.5 with reading and writing no less than 5.5 and no other sub-band less than 5 (or approved equivalent); OR

3. Degree Entry (IELTS 6.0) - Produce original documentary evidence of an IELTS score with an overall minimum of 5.5 with no sub-band less than 5 (or approved equivalent).

* You should check the English language requirements for a Student Visa from your country of origin.

Description

The aim of the EAP course is to assist international students to upgrade their English proficiency level to meet university entry requirements. The course is designed to prepare students for independent study and to familiarise them with an Australian academic setting in terms of study techniques and student/lecturer relations and expectations.

Course Completion

To be eligible to receive EAP certification at the end of the course, students must complete all course requirements.

On successful completion of the course, students will receive a Completion & Attendance Certificate and a Statement of Results.

Progresssion

Successful completion of an EAP course is a pathway into QUT International College Foundation, Diploma, Certificate or Bridging programs; or QUT undergraduate or postgraduate award programs. The course is recognised by all QUT faculties.

Course structure

Modules
QCE003   English for Academic Purposes for Direct Entry to QUT

The EAP course consists of the following integrated modules:

Seminars and Presentations

Academic Reading and Note-taking

Academic Writing

Listening and Note-taking from Lectures

Speaking in Academic Settings

Academic Study Skills

Computer Word-processing and Internet research skills

Library research skills

English for Academic Purposes for Foundation and University Diploma Programs (QC10)

Year offered: 2009
Admissions: Yes
CRICOS code: 011424G
Course duration (full-time): 12 weeks
International Fees (per semester): 2009: $3,960 per semester + $100 non-refundable enrolment fee *(subject to annual review)*
International Entry: March, July and October (dates are designed to allow entry to selected semester of next course)
Total credit points: 48
Course coordinator: John Healy
Campus: Kelvin Grove

Entry requirements*

To be eligible for entry, applicants must either:

1. Have an offer of a place in a QUT Foundation or Diploma program and successfully complete the relevant EAP entry test; or

2. Produce original documentary evidence of an IELTS score of a minimum 5.0 with reading and writing sub-score of at least 5.0 (or approved equivalent).

* You should check the English language requirements for a Student Visa from your country of origin.

Description

This course is designed for students intending to gain entry to University Entry programs (Foundation and University Diplomas). Its purpose is to improve students' English language and study skills in order to prepare them for independent study and to familiarise them with the Australian academic environment.

Course Completion

To be eligible to receive EAP certification at the end of the course, students must complete all course requirements.

On successful completion of the course, students will receive a Completion & Attendance Certificate and a Statement of Results.

Progression

Successful completion of this EAP course is a pathway into QUT International College Foundation and Diploma programs and the Associate Degree in Dance.

QC10 - English for Academic Purposes for Foundation and University Diploma Programs

Modules	
QCE004	English for Academic Purposes for QUTIC Courses
	The EAP course consists of the following integrated modules:

- Seminars and Presentations
- Academic Reding and Note-taking
- Academic Writing
- Listening and Note-taking from Lectures
- Speaking in Academic Settings
- Academic Study Skills
- Computer Word-processing and Internet research skills
- Library research skills

General English (QC20)

Year offered: 2009
Admissions: Yes
CRICOS code: 062077K
Course duration (full-time): 5 weeks
International Fees (per semester): 2009: $1,650 per 5 week session + $100 non-refundable enrolment fee *(subject to annual review)*
International Entry: 9 entry dates per year.
Total credit points: 20
Course coordinator: Ian Davies (ip.davies@qut.edu.au)
Campus: Kelvin Grove

Entry Requirements - English Language

Students should check visa requirements in relation to English entry levels.

Description

This course offers English language and study skills for students preparing for entry to EAP, Foundation, Certificate and Diploma programs and QUT undergraduate and postgraduate award programs.

There are also non-academic English language courses at all levels from beginners to advanced. These courses include excursions and activities (which may incur some additional, minimal cost).

All English language courses include 25 hours of classes per week and there are new intakes every five weeks - for entry dates please see http://www.qutic.qut.edu.au/about/entrydates/calendars.jsp

Course Completion

On completion of the course, students will receive a Completion/Proficiency Certificate and an Attendance Certificate.

Progression

Progress is monitored on a student profile which is created for each student over the length of the course. All assessment results (formative/summative/diagnostic) are recorded.

Students can progress from General English into the EAP course or other programs. Progression is subject to entry requirements.

QC20 - General English

General English

QCE001   General English (Full-time)

While specific content varies according to level, broadly the course consists of:

English Language Structures & Systems

Grammar

Vocabulary

Integrated Skills Development (reading, writing, speaking, listening)

Cultural Studies, including field trips and excursions (which may incur some additional, minimal cost)

Electives Activities Program

Computer-based language learning

Independent learning skills

General English Extension (QC21)

Year offered: 2009
Admissions: Yes
Course duration (full-time): 5 weeks
International Fees (per semester): 2009: $1,650 per 5 week session + $100 non-refundable enrolment fee *(subject to annual review)*
International Entry: Every 5 weeks
Total credit points: 20
Course coordinator: Ian Davies (ip.davies@qut.edu.au)
Campus: Kelvin Grove

Entry Requirements - English Language

Students should check visa requirements in relation to English entry levels.

This course is for students enrolled in QC20 General English and wishes to continue their enrolment in General English.

Description

This course offers English language and study skills for students preparing for entry to EAP, Foundation, Certificate and Diploma programs and QUT undergraduate and postgraduate award programs.

There are also non-academic English language courses at all levels from beginners to advanced. These courses include excursions and activities (which may incur some additional, minimal cost).

All English language courses include 25 hours of classes per week and there are new intakes every five weeks - for entry dates please see http://www.qutic.qut.edu.au/about/entrydates/calendars.jsp

Course Completion

On completion of the course, students will receive a Completion/Proficiency Certificate and an Attendance Certificate.

Progression

Progress is monitored on a student profile which is created for each student over the length of the course. All assessment results (formative/summative/diagnostic) are recorded.

Students can progress from General English into the EAP course or other programs. Progression is subject to entry requirements.

QC21 - General English Extension

General English Extension

QCE001 General English (Full-time)

While specific content varies according to level, broadly the course consists of:

English Language Structures & Systems

Grammar

Vocabulary

Integrated Skills Development (reading, writing, speaking, listening)

Cultural Studies, including field trips and excursions (which may incur some additional, minimal cost)

Electives Activities Program

Computer-based language learning

Independent learning skills

English for Tertiary Preparation (QC22)

Year offered: 2009
Admissions: Yes
CRICOS code: 045062C
Course duration (full-time): 2 weeks
International Fees (per semester): 2009: $660 + $100 non-refundable enrolment fee *(subject to annual review)*
International Entry: February, June and October
Total credit points: 8
Course coordinator: Michael Miller (mj.miller@qut.edu.au)
Campus: Kelvin Grove

Entry Requirements

Academic requirements:
An offer of acceptance for a QUT Foundation or University Diploma course.

English requirements:
An IELTS score of at least 5.5 (with sub-scores of at least 5.0) or approved equivalent.

Description

The course aims to enhance the English language proficiency of students who already meet the IELTS requirements for their Foundation or University Diploma Program. ETP teaches and practices academic writing, reading, listening and speaking.

The course assists students with the adjustment to studying at an Australian university.

Course Completion

On completion of the course, students will receive a Completion and Attendance Certificate.

QC22 - English for Tertiary Preparation

English for Tertiary Preparation
QCE005   English for Tertiary Preparation Studies

English For Academic Purposes Plus (QC24)

Year offered: 2009
Admissions: Yes
CRICOS code: 064814K
Course duration (full-time): 24 weeks
International Fees (per semester): 2009: $7920 per block + A$100 non-refundable enrolment fee *(subject to annual review)*
International Entry: April, July and November (dates are designed to allow entry to selected semester of next course)
Total credit points: 96
Course coordinator: John Healy
Campus: Kelvin Grove

Entry Requirements - Academic

To be eligible for entry, applicants must have:

1. A conditional offer for a QUT degree program. Students without a conditional offer who wish to improve their academic English may also apply if they meet the English language entry requirements.

OR

2. Produce original documentary evidence of an IELTS score of a minimum 5.0 with reading and writing sub-scores of at least 5.0 (or approved equivalent). Students will also sit a placement test at the beginning of their course.

* You should check the English language requirements for a Student Visa from your country of origin.

Description

EAP Plus has been specifically developed for students who wish to commence their entry into an English for Academic Purposes course earlier. Successful applicants can enter the course at pre-intermediate level and immediately begin developing their English language and study skills in an academic context.

EAP Plus enables students to begin developing their English language and study skills in an academic context from a pre-intermediate level. The course aims to prepare students to attain the level of proficiency required for gaining entrance to, and succeeding in QUT undergraduate and postgraduate award programs. EAP Plus courses include:
â¢ Academic reading and note-making
â¢ Academic writing
â¢ Listening and note-taking from lectures
â¢ Speaking in academic settings
â¢ Seminars and presentations
â¢ Academic study skills
â¢ Computing and Internet skills
â¢ Library research

During the first 12 weeks of the EAP Plus course, students will develop their paragraph writing, reading, listening and note-taking skills through theme-based topics at an introductory academic level, along with speaking and oral presentation skills in a highly-supported environment.

Weekly grammar, paraphrasing and vocabulary development supports the reading, writing and note-taking components. Reading skills are also enhanced via extended reading practice and specific reading skills lessons.

The second half of the course will further develop independent study skills enabling students to operate effectively in an Australian academic setting in terms of study techniques and student/lecturer relations and expectations.

EAP Plus has its own internal assessment consisting of exams and assignments, and successful students will meet QUTâs English language requirements.

Course Completion

To be eligible to receive EAP Plus Certificate at the end of the course, studfents must complete all course requirements.

On successful completion of the course, students will receive a Completion & Attendance Certificate and a Statement of Results.

Progression

Successful completion of the EAP Plus course provides a pathway into QUT undergraduate and postgraduate award programs for students who meet the academic requirements for these programs.

Course structure

QCE009	EAP Plus
QCE003	English for Academic Purposes for Direct Entry to QUT
	The EAP Plus course consists of the following integrated modules:
	Seminars and Presentations
	Academic Reading and Note-Taking
	Academic Writing
	Listening and Note-taking from Lectures
	Speaking in Academic Settings
	Academic Study Skills
	Computing and Internet Research Skills
	Library Reserach Skills

Bachelor of Applied Science (SC01)

Year offered: 2009
Admissions: Yes
CRICOS code: 003502J
Course duration (full-time): 3 Years
Course duration (part-time): 6 Years
Domestic fees (indicative): 2009: CSP $3,694 (indicative) per semester
International Fees (per semester): 2009: $11,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February and July
International Entry: February and July* (Conditions apply for July entry)
QTAC code: 418011
Past rank cut-off: 75
Past OP cut-off: 13
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 288
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Marion Bateson
Discipline coordinator: Dr Perry Hartfield (Biochemistry); Dr Marion Bateson (Biotechnology); Dr Robert Johnson (Chemistry); Dr Ian Williamson (Ecology); Dr Robin Thwaites (Environmental Science); Dr Emad Kiriakous (Forensic Science); Dr Gary Huftile (Geoscience); Dr Christine Knox (Microbiology); Dr Greg Michael (Physics)
Campus: Gardens Point

Recommended Study

At least one of the sciences. For the majors in biochemistry, biotechnology, forensic science, and microbiology - Biological Science and Chemistry are recommended; for the major in physics - Maths C is recommended.

Course Design

The flexibility of QUT's Bachelor of Applied Science allows you to tailor the qualification to your needs and career aspirations. Can you see yourself as a forensic scientist, geologist, chemist, physicist, microbiologist or environmental scientist? Perhaps you would like to be at the forefront of the latest discoveries in genetic engineering, or improve the lives of others by researching new diagnostic techniques and treatments for diseases, or monitor a community's water supply ensuring it is safe to drink. You could even help save an endangered species, investigate renewable energy sources, advise world leaders on the causes and effects of global warming, or discover a new star in a far away galaxy.

You will graduate with specialised knowledge of cutting-edge technologies and extensive practical experience using the latest techniques. You choose your career direction and QUT's Bachelor of Applied Science will set you on the right path by ensuring you are employment-ready when you graduate.

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 semester of study. QUT staff are available to advise on how best to structure your degree to suit your personal and career aspirations. When you have decided on a preferred career direction, you can be sure that you will graduate with the necessary specialist theoretical knowledge and well-developed practical skills. As QUT courses are designed in close consultation with industry you will receive the relevant professional accreditation when you graduate.

You will choose an area of specialisation (major) from the list below and this will form the basis for your qualification, for example Bachelor of Applied Science (Forensic Science). You will also choose a secondary specialisation (co-major) to complement your major studies. This secondary specialisation may be one of the other majors, a science co-major, or an area outside the science disciplines. Several elective units allow you to broaden your knowledge and skills.

Science Majors, Science Co-majors and Non-Science Co-majors:

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

* The Forensic Science major must be taken as a double major with another science area eg Chemistry or Biotechnology.

Science Co-majors:
One of the majors listed above or:
Applied Geology
Astrophysics
Biodiversity
Chemistry for Industry
Life Science Technologies
Mathematics
Or a non-science co-major

Examples of Non-Science Co-majors:
Aviation
Corporate IT Systems
Environmental Engineering Studies
Ethics and Human Rights
Foreign Languages
Games Technology
Geography
Journalism

Management
Marketing
Music
Psychology
Spatial Science

Major Areas of Study
Biochemistry:
Biochemistry is the study of the chemical processes that occur in living organisms including the chemical structure, function and properties and energy flows. Biochemistry is an essential and very successful area of study for many practitioners in the life sciences industry. Biochemistry students at QUT gain both the theoretical knowledge to understand biochemical problems and formulate solutions, and the practical skills to carry out the necessary laboratory investigations that test these solutions for real-world application. Students gain hands-on practical laboratory experience from their first year of study.

Career Opportunities
Strong employment opportunities exist around the world in both the private and government sectors of industry for biochemists. QUT graduates skilled in biochemistry can find career opportunities in research, diagnostic and analytical laboratories, universities, hospitals and health departments, pharmaceutical companies, primary and agricultural industries and departments, food industry laboratories, environmental agencies, veterinary pathology laboratories and in the area of marketing, sales, commercialisation and management of biological products and processes.

Professional Recognition
Graduates are eligible for membership of the Australian Society for Biochemistry and Molecular Biology, and possibly the Australasian Association of Clinical Biochemists.

Biotechnology:
Biotechnology is the application of molecular biology and biochemical principles to create a new generation or products and processes for the benefit of society. Biotechnology is one of the fastest growing areas of science and business in the world today. Modern biotechnology uses the techniques of genetic engineering to enable faster, cheaper and more reliable production of an ever-increasing range of engineered products. The integration of biotechnology research into QUT Biotechnology courses ensures that you will receive access to the latest information and hands-on laboratory experience in contemporary molecular technologies. All students receive hands-on practical laboratory experience from your first year of study in Queensland's newest biotechnology teaching laboratories.

Career Opportunities
Globally and locally the developing biotechnology industry demands highly skilled graduates. As a 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; while existing career opportunities in hospitals and diagnostic laboratories continue to expand.

Professional Recognition
Graduates are eligible for membership of AusBiotech Ltd, Australian Society for Biochemistry and Molecular Biology, and possibly the Australian Society for Medical Research, and the Australian Society for Microbiology.

Chemistry:
Chemistry is the study of the structure, properties, synthesis and reactions of materials. Chemistry is one of the central sciences since its results are used in almost all areas of science - including life sciences, the environment, geosciences, biology, and food science. The Chemistry major at QUT allows you to gain an appreciation of the fundamental discipline - covering physical, organic and inorganic chemistry - but with an additional focus on modern applications such as drug discovery, analytical and environmental chemistry, polymer science and surface science. All theory is complemented with a comprehensive laboratory program, particularly with hands-on experience with modern computer-based analytical instruments.

QUT is among the few universities in Australia with a first year subject (Experimental Chemistry) devoted entirely to experimental techniques. Where most universities offer only two units of chemistry in the first year, we offer three units. Students have a total of 10 laboratory sessions in this subject and are exposed to a wide variety of experimental techniques. Our training in analytical chemistry throughout the chemistry degree is nationally renowned.

All third year chemistry students will undertake a one semester research project under the guidance of experienced staff. Students will be trained in state-of-the-art techniques and will have the opportunity to pursue a field of interest to them.

Career Opportunities
Chemists are key professionals in industries that manufacture goods such as paints, paper, textiles, glass, plastics and rubber, metals and alloys, gases and fuels, foodstuffs and chemicals. Government agencies depend on chemists to develop and monitor standards for meat research, animal health pest control, preservation of timber, environmental chemistry, forensic analysis and coal chemistry. You can expect to find employment as an industrial chemist, material scientist, environmental chemist, quality control analyst, production supervisor, food chemist, organic chemist and inorganic chemist.

QUT graduates are sought after by police and other forensics labs because of their extensive practical training using modern analytical instrumentation.

Professional Recognition
Students completing the Chemistry major with the Industrial Chemistry or Forensic Science co-major are eligible for membership of the Royal Australian Chemical Institute.

Ecology

Ecology is the study of relationships between organisms and their environment. Ecology helps us to understand the distribution and abundance of organisms. As an applied science it is used to design strategies for the management of populations of organisms (both natural and commercial). The Ecology major at QUT will allow you to gain a broad range of scientific skills including the specialist techniques required for conserving and managing endangered animals, controlling pests, managing exploited populations and evaluating issues associated with the management of our natural resources.

Career Opportunities
Ecologists find rewarding careers in research science for government departments responsible for pest management, national park and wildlife, primary industries, fisheries, forestry and museums. They also find work in private firms engaged in research and consultancy work. Positions include fisheries biologist, wildlife manager, scientific or technical officer, teacher or lecturer and research scientist. Employment in more specialised areas is available, usually requiring study beyond the first degree.

Professional Recognition
Professional recognition is achieved through a scientific society (ie Ecological Society of Australia) and participation in its meetings.

Environmental Science:

Environmental Science at QUT is the application of fundamental, core science disciplines to problems encountered in the management and understanding of our environment. Studies will allow you to gain both the strong scientific base and the generic skills to apply your scientific knowledge to a wide range of environmental problems. Rather than learning simply to describe the different environmental systems, you will gain an understanding of the mechanisms that control these systems, and the interaction between the various components. All environmental science units include laboratory and fieldwork with an emphasis on problem-solving through project work. You will be introduced to standardised methods and principles for environmental modelling and monitoring that can be applied across all disciplines.

Career Opportunities
Environmental scientists are needed in a wide variety of government departments and agencies, in consultancy and in manufacturing and mining companies. Graduates are equipped to assess resources, design and implement environmental impact programs, analyse and interpret environmental data and formulate contingency plans in a wide variety of areas including strategic land-use planning, waste disposal, pollution measurement and control, coastal protection, environmental impact of mining, tourism and development, rehabilitation and reforestation of contaminated land sites, groundwater assessment and modelling, waterway and floodplain drainage planning, erosion control in waterways, and marine science.

Professional Recognition

Graduates are eligible for membership of the Environment Institute of Australia and New Zealand.

Forensic Science

Forensic Science involves the application of chemical and biological principles and laboratory processes to identify and quantify matter within a legal context. Areas that are relevant to forensic science are wide ranging, and include: the detection and identification of illicit drugs, explosive and gunshot residues, accelerants used in arson cases, and trace evidence (eg paint, glass, fibres, soil); DNA profiling, where it is possible to distinguish between individuals on the basis of samples involving blood, saliva, hair or semen; toxicology studies to identify illicit and pharmaceutical drugs and poisons and interpret toxicity levels and their effect on the human body; and fingerprinting.

Career Opportunities
Employment opportunities exist for trained forensic scientists who work in laboratories handling criminal casework in areas including forensic biology, forensic chemistry, and forensic toxicology. QUT graduates in Forensic Science not only receive a strong grounding in core areas of both forensic biology and forensic chemistry but complement their major in Forensic Science with a full major in Biotechnology or Chemistry. This course structure gives QUT Forensic Science graduates an enhanced qualification for careers in either Forensic Biology or Forensic Chemistry. In addition, the second major adds flexibility to future career paths by enabling Forensic Science graduates to gain employment either as a chemist or a biotechnologist if they prefer.

Professional Recognition
Graduates who complete the Forensic Science major in conjunction with the Biotechnology major are eligible for membership of the Australian and New Zealand Forensic Science Society, AusBiotech Ltd, and the Australian Society for Biochemistry and Molecular Biology.

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 and the Royal Australian Chemical Institute.

Geoscience:

Geoscience is the systematic study of the earth and the dynamic interactions of its systems. Geoscience incorporates a study of the materials of the earth, the natural processes acting in and upon the earth, and its history. The Geoscience major at QUT allows you to gain the skills needed to become a professional geologist and emphasises hands-on experience through laboratory work and field studies. It provides a broad range of geological skills as well as training in the specialist techniques required for field mapping and geological interpretation.

Career Opportunities
Geoscientists work in a range of areas including environmental geology, hydrogeology, hazard and pollution

control, and coastal zone management. Employment opportunities exist within mining and exploration companies which may involve underground geological mapping, evaluation of ore reserves, production control, or exploration for new mineral deposits; petroleum companies working on offshore drilling rigs; and a variety of government organisations working as field geologists or research scientists. Other graduates work in computing, data modelling, and remote sensing. An honours degree is 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, Australian Institute of Geoscientists, and the Geological Society of Australia.

Microbiology:
Microbiology is the study of living organisms of microscopic size. The principal components are bacteriology, virology and mycology, and areas of fundamental importance in the applied sciences of pathology and immunology. You will develop skills and knowledge in the handling and study of micro-organisms and investigation of their properties. Advanced studies allow you to expand your knowledge and expertise in your specialised area such as human pathology, animal and plant diseases, food technologies, environmental testing (soil, air and water) and bioremediation, and molecular applications of microbiological principles.

Career Opportunities
Microbiologists are employed in a variety of careers including human pathology testing in bacteriology, immunology, mycology, parasitology and virology, animal and plant disease, treatment of inorganic waste, food fermentations and microbiological testing of goods for pathogens or spoilage organisms, water and soil microbiology and research. Employment opportunities exist in private and government research and analytical laboratories, such as the CSIRO, universities, hospitals, health departments, primary industry departments, food industry laboratories, environmental agencies, and in the marketing of biological products.

Professional Recognition
Graduates are eligible for membership of the Australian Society for Microbiology.

Physics:
Physics is the science discipline dealing with the natural laws and processes, with the states and properties of matter and energy. Physics also underlies many of the recent advances in information technology, medicine and biotechnology. Areas of specialisation include mechanics, electromagnetism, lasers and modern optics, computational physics, nuclear and radiation physics, quantum mechanics and relativity.

Career Opportunities
Physicists are an asset to almost every industry. They are broadly-educated professionals who are trained in applied and experimental physics, instrumentation and a range of other specific methods required for traditional and newly-developed avenues of scientific employment. QUT Physics graduates work in large manufacturing companies, often as members of research and development teams, supervising the testing and production of raw materials and finished articles. Increasing opportunities for graduates with appropriate studies exist in noise measurement and control, environmental monitoring, meteorology, lasers, computing, technical equipment sales, teaching and research. Graduates work in large hospitals and medical institutions such as the Queensland Radium Institute. Broad training in data analysis and problem-solving skills also makes physicists well suited to management roles in a range of technology-based industries.

Professional Recognition
Graduates are eligible for membership of the Australian Institute of Physics.

Science Co-Major Areas of Study
Applied Geology:
The Applied Geology co-major is designed to complement the Geoscience major. The skills learned through core units in the major are applied to activities related to the petroleum, mineral, hydrogeological and environmental professions. You will learn the specialist techniques required to understand the genesis of ore deposits, set up mineral exploration programs, produce groundwater models, understand the fluid flow in petroleum reservoirs or manage the effects of human activity on the environment.

Astrophysics:
The Astrophysics co-major is an exciting blend of astrophysics, geophysics, cosmology, digital image processing and remote sensing units, designed to be taken with a major in Physics, Mathematics or Geoscience. The co-major is relevant to many real-world problems, for example, satellite technology, telecommunications, minerals exploration and global warming. By taking this co-major you will develop interdisciplinary skills in computing, instrumentation, image processing, geodesy and materials science that will be useful for a wide variety of careers in industry and the public sector.

Biodiversity:
Biodiversity has evolved over the last few years as a discipline concerned with the conservation and sustainable use of the earth's biological diversity. It deals with the components of biological diversity, genes to biomes, and seeks to describe and quantify this diversity, and determine how it is produced and maintained. The Biodiversity co-major is designed to complement both the Ecology and Environmental Science majors. The theme of the co-major is Australian biodiversity. Common threads are the basic biology of the species in Australian ecosystems, the systems they are a part of, and the evolution of these species and ecosystems.

Chemistry for Industry:
The Industrial Chemistry co-major is designed to partner the Chemistry major. The emphasis is on analytical chemistry

and chemical technology. It aims to familiarise students with state-of-the-art equipment and modern laboratory information systems as well as online monitoring and control of industrial processes. The co-major is well recognised by employers in industrial, hospital and sports laboratories, by food and pharmaceutical producers and by instrument manufacturers as well as research organisations. Graduates from this program can look forward to a rewarding career commencing employment as a chemist and then moving through an organisation in supervisory and managerial capacities. A number of industry-sponsored bursaries are available each year for students enrolled in the Chemistry major/Chemistry for Industry co-major.

Life Science Technologies:
The many and varied disciplines which are characteristic of research and development activities in the life sciences are reflected in employer demand for a broad range of graduates with different specialisations. To accommodate this demand a Biomolecular Sciences co-major is available in the Bachelor of Applied Science. In this co-major, students may compose a combination of six approved units from the Biotechnology, Biochemistry and Microbiology majors. You will benefit from a broad range of biomolecular theory and skills, closely aligned to personal interests, for application in an ever-increasing variety of niche employment opportunities.

Mathematics:
The Mathematics co-major concentrates on applied mathematics or financial mathematics and operations research or on statistics. Mathematicians enjoy a wide range of career options, working for major corporations including banks and insurance companies, industry, information technology companies, consultancy groups, research organisations, universities, schools and various government departments. Students who wish to cover a range of areas of mathematics should consider enrolling in MA54 Bachelor of Mathematics. This course focuses on applications and includes an emphasis on developing communication skills.

Or a non-science co-major: Aviation, Corporate IT Systems, Environmental Engineering Studies, Ethics and Human Rights, Foreign Languages, Games Technology, Geography, Journalism, Management, Marketing, Music, Psychology, Spatial Science.

Professional Recognition
For graduates with approved study: AusBiotech Ltd, Australasian Association of Clinical Biochemists, Australasian Institute of Mining and Metallurgy, 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 Microbiology, Australian Society for Operations Research, Ecological Society of Australia, Environment Institute of Australia and New Zealand, Geological Society of Australia, Royal Australian Chemical Institute, Statistical Society of Australia.

Course Rules
1. To fulfil the requirements for the award of the Bachelor of Applied Science degree, a student must complete a total of at least 288 credit points, comprising at least 192 credit points in units offered by the Faculty of Science. The units completed for the award of the degree must include:

(a) the first year program as outlined in the course summary sheet.
(b) a major study
(c) a co-major study.

Major and co-major studies are defined in terms of the discipline area and the academic level at which the units are offered.

A *major* must be completed in one of the following discipline areas: biochemistry; biotechnology; chemistry; ecology; environmental science; forensic science; geoscience; microbiology; physics. A major comprises 96 credit points of units at advanced level, including at least 48 credit points at the third level.

A *co-major* may be completed by selecting appropriate units from another major, or from the following discipline areas:

Science applied geology, astrophysics, biodiversity, chemistry for industry, environmental science, life science technologies, mathematics.

Non-Science: aviation, corporate IT systems, digital media, environmental engineering studies, ethics and human rights, foreign languages, games technology, geography, human movement studies, journalism, management, marketing, music, psychology, spatial science.

A co-major comprises 72 credit points with at least 60 credit points at advanced level for the Science co-majors and at least 48 credit points for the non-Science co-majors. Major and co-major studies may be taken in closely related discipline areas.

2. Elective units may be chosen from (a) SCO1 majors/co-majors other than those undertaken by a student, (b) other appropriate units offered by the Faculty of Science, and (c) units offered by other faculties.

3. Students are normally expected to complete the course in minimum time. A full-time student normally enrols in an average of 48 credit points per semester for six semesters and a part-time student normally enrols in 24 credit points per semester for 12 semesters. (A full-time student is one who is enrolled in 36 or more credit points per semester, whereas a part-time student is one who is enrolled in less than 36 credit points per semester.)

Notes on the Rules

1. For offerings in the Faculty of Science, the term advanced level refers to units in Schedules 2 and 3. For units offered outside the Faculty of Science, 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 co-major(s) in which the unit is offered are shown. It should be noted that not every advanced level unit offered in each major/co-major is mandatory.

3. The major undertaken by a student will qualify the generic award title of BAppSc and will appear in the award title in parentheses. The general form of the award will therefore be: BAppSc(Major).

Contact Details
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Discipline Coordinators

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Deferment
QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, portfolios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Course structure - Major in Biochemistry

Year 1, Semester 1	
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus ONE of:
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB111	Mathematical Sciences 1B
NOTE:	1. Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105.
	2. Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101
	3. Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB111.
	4. Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB100.

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 2, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
	Plus TWO other units selected according to the co-major requirements

Year 2 Semester 2 *	
LQB481	Biochemical Pathways and Metabolism
LQB483	Molecular Biology Techniques
	Plus TWO other units selected according to the co-major requirements

Year 3, Semester 1 *

LQB581	Functional Biochemistry
LQB582	Biomedical Research Technologies
	Plus TWO other units selected according to the co-major requirements

Year 3, Semester 2 *

LQB681	Biochemical Research Skills
LQB682	Protein Biochemistry and Bioengineering
	Plus TWO other units selected according to the co-major requirements

Recommended Co-majors:

Biotechnology, Chemistry, Forensic Science, Life Science Technologies, Microbiology

* Elective Unit for all Majors:

SCB500	Industry Project
NOTE:	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.

Course structure - Major in Biotechnology

Year 1, Semester 1

SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus ONE of:
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB111	Mathematical Sciences 1B
NOTE:	1. Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105
	2. Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101.
	3. Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB111.
	4. Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB100.

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 2, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
	Plus TWO other units selected according to the co-major requirements

Year 2, Semester 2 *

LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics
	Plus TWO other units selected according to the co-major requirements

Year 3, Semester 1 *

	Select TWO units from:
LQB583	Genetic Research Technology
LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation
	Plus TWO other units selected according to the co-major requirements

Year 3, Semester 2 *

	Select TWO units from:
LQB682	Protein Biochemistry and Bioengineering
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions
	Plus TWO other units selected according to the co-major requirements

Recommended Co-majors:

Biochemistry, Forensic Science, Life Science Technologies, Microbiology

* Elective Unit for all Majors:

SCB500	Industry Project
NOTE:	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.

Course structure - Major in Chemistry

Year 1, Semester 1

SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus ONE of:
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB111	Mathematical Sciences 1B
NOTE:	1. Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105.
	2. Students with a Sound Achievement in Maths B and NOT wishing to major in

Mathematics or Physics should enrol in MAB101.

3. Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB111.

4. Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB100.

Year 1, Semester 2

SCB121	Chemistry 2
SCB123	Physical Science Applications
SCB131	Experimental Chemistry
	Plus either
MAB100	Mathematical Sciences 1A
	Or
SCB122	Cell and Molecular Biology

Year 2, Semester 1

PQB312	Analytical Chemistry For Scientists and Technologists
PQB331	Structure and Bonding
	Plus TWO other units selected according to the co-major requirements

Year 2, Semester 2 *

PQB401	Reaction Kinetics, Thermodynamics and Mechanisms
PQB442	Chemical Spectroscopy
	Plus TWO other units selected according to the co-major requirements

Year 3, Semester 1 *

PQB502	Materials Chemistry and Characterisation
PQB531	Organic Mechanisms and Synthesis
	Plus TWO other units selected according to the co-major requirements

Year 3, Semester 2 *

PQB631	Advanced Inorganic Chemistry
PQB642	Chemical Research
	Plus TWO other units selected according to the co-major requirements

Recommended Co-majors:

Biochemistry, Biotechnology, Chemistry for Industry, Forensic Science

* Elective Unit in all Majors:

SCB500	Industry Project
NOTE:	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.

Course structure - Major in Ecology

Year 1, Semester 1

SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus ONE of:
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB111	Mathematical Sciences 1B
NOTE:	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 MAB111.
	4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB100.
	5. Students without a Sound Achievement in Maths B or Maths A should consult with the course coordinator.

Year 1, Semester 2

NQB202	History of Life on Earth
SCB120	Plant and Animal Physiology
NQB201	Planet Earth
	Plus either
SCB121	Chemistry 2
	Or
SCB123	Physical Science Applications
	Or
SCB122	Cell and Molecular Biology

Year 2, Semester 1

NQB321	Ecology
	Plus ONE of:
NQB302	Earth Surface Systems
NQB322	Invertebrate Biology
NQB323	Plant Biology
	Plus TWO other units selected according to the co-major requirements

Year 2, Semester 2 *

NQB421	Experimental Design
NQB422	Genetics and Evolution
	Plus TWO other units selected according to the co-major requirements

Year 3, Semester 1 *

NQB521	Population Genetics and Molecular Ecology

NQB523   Population Management

Plus TWO other units selected according to the co-major requirements

NQB622   Population Genetics

NQB623   Ecological Systems

Plus TWO other units selected according to the co-major requirements

Recommended Co-majors:

Biodiversity, Environmental Science

* Elective Unit for all Majors:

SCB500   Industry Project

NOTE: 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.

Course structure - Major in Environmental Science

Year 1, Semester 1

SCB110   Science Concepts and Global Systems

SCB111   Chemistry 1

SCB112   Cellular Basis of Life

Plus ONE of:

MAB100   Mathematical Sciences 1A

MAB101   Statistical Data Analysis 1

MAB105   Preparatory Mathematics

MAB111   Mathematical Sciences 1B

NOTE: 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 MAB111.

4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB100.

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

Year 1, Semester 2

NQB202   History of Life on Earth

SCB120   Plant and Animal Physiology

NQB201   Planet Earth

Plus either

SCB121   Chemistry 2

Or

SCB123   Physical Science Applications

Or

SCB122   Cell and Molecular Biology

Year 2, Semester 1

NQB302   Earth Surface Systems

NQB321   Ecology

Plus TWO other units selected according to the co-major requirements

Year 2, Semester 2 *

NQB403   Soils and the Environment

NQB421   Experimental Design

Plus TWO other units selected according to the co-major requirements

Year 3, Semester 1 *

NQB501   Environmental Modelling

Plus either

NQB502   Field Mapping and Monitoring of Natural Resources

Or

NQB503   Spatial Analysis of Environmental Systems

Plus TWO other units selected according to the co-major requirements

Year 3, Semester 2 *

NQB601   Sustainable Environmental Management

Plus ONE of

NQB602   Environmental Chemistry

NQB614   Groundwater Systems

NQB623   Ecological Systems

Plus TWO other units selected according to the co-major requirements

Recommended Co-majors:

Biodiversity, Ecology, Geoscience

* Elective Unit for all Majors:

SCB500   Industry Project

NOTE: 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.

Course structure - Major in Forensic Science

Note: Must be taken as a double major with Biochemistry, Biotechnology, Chemistry or Microbiology

Year 1, Semester 1

SCB110   Science Concepts and Global Systems

SCB111   Chemistry 1

SCB112   Cellular Basis of Life

Plus ONE of:

MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB111	Mathematical Sciences 1B
NOTE:	1. Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105.
	2. Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101.
	3. Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB111.
	4. Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB100.

Year 1, Semester 2

SCB121	Chemistry 2
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications
SCB131	Experimental Chemistry

Year 2, Semester 1

LQB383	Molecular and Cellular Regulation
SCB384	Forensic Sciences - From Crime Scene to Court
	Plus TWO other units selected according to the second-major requirements

Year 2, Semester 2 *

JSB979	Forensic Scientific Evidence
PQB312	Analytical Chemistry For Scientists and Technologists
	Plus TWO other units selected according to the second-major requirements

Year 3, Semester 1 *

PQB513	Instrumental Analysis
PQB584	Forensic Physical Evidence
	Plus TWO other units selected according to the second-major requirements

Year 3, Semester 2 *

LQB680	Forensic DNA Profiling
PQB684	Forensic Analysis
	Plus TWO other units selected according to the second-major requirements

* Elective Unit for all Majors:

| SCB500 | Industry Project |
| NOTE: | 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. |

Course structure - Major in Geoscience

Year 1, Semester 1

SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus ONE of:
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB111	Mathematical Sciences 1B
NOTE:	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 MAB111.
	4. Students without a Sound Achievement in Maths C and wishing to major in Physics should enrol in MAB100.
	5. Students without a Sound Achievement in Maths B or Maths A should consult with the course coordinator.

Year 1, Semester 2

NQB201	Planet Earth
NQB202	History of Life on Earth
SCB123	Physical Science Applications
SCB222	Exploration of the Universe

Year 2, Semester 1

NQB311	Mineralogy
NQB314	Sedimentary Geology
	Plus TWO other units selected according to the co-major requirements

Year 2, Semester 2 *

NQB411	Petrology of Igneous and Metamorphic Rocks
NQB412	Structural Geology and Field Methods
	Plus TWO other units selected according to the co-major requirements

Year 3, Semester 1 *

NQB502	Field Mapping and Monitoring of Natural Resources
NQB513	Geophysics
	Plus TWO other unit selected according to the co-major requirements

Year 3, Semester 2 *

NQB615	Geochemistry
	Plus ONE of
NQB612	Basin Analysis and Petroleum Geology

NQB613	Plate Tectonics
NQB614	Groundwater Systems
	Plus TWO other units selected according to the co-major requirements

Recommended Co-majors:	
	Applied Geology, Environmental Science, Physics

* Elective Unit for all Majors:	
SCB500	Industry Project
NOTE:	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.

Course structure - Major in Microbiology

Year 1, Semester 1	
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus ONE of:
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB111	Mathematical Sciences 1B
NOTE:	1. Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105.
	2. Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101.
	3. Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB111.
	4. Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB100.

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications

Year 2, Semester 1	
LQB381	Biochemistry: Structure and Function
LQB386	Microbial Structure and Function
	Plus TWO other units selected according to the co-major requirements

Year 2, Semester 2 *	
LQB483	Molecular Biology Techniques

LQB486	Clinical Microbiology 1
	Plus TWO other units selected according to the co-major requirements

Year 3, Semester 1 *	
LQB586	Clinical Microbiology 2
LQB587	Applied Microbiology 1: Water, Air and Soil
	Plus TWO other units selected according to the co-major requirements

Year 3, Semester 2 *	
LQB686	Microbial Technology and Immunology
LQB687	Applied Microbiology 2: Food and Quality Assurance
	Plus TWO other units selected according to the co-major requirements

Recommended Co-majors:	
	Biochemistry, Biotechnology, Forensic Science, Life Science Technologies

* Elective Unit for all Majors:	
SCB500	Industry Project
NOTE:	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.

Course structure - Major in Physics

Year 1, Semester 1	
SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	Plus ONE of:
MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB105	Preparatory Mathematics
MAB111	Mathematical Sciences 1B
NOTE:	1. Students without a Sound Achievement (4 semesters) in Maths B should enrol in MAB105.
	2. Students with a Sound Achievement in Maths B and NOT wishing to major in Mathematics or Physics should enrol in MAB101.
	3. Students with a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB111.
	4. Students without a Sound Achievement in Maths C and wishing to major in Mathematics or Physics should enrol in MAB100.

Year 1, Semester 2	
MAB112	Mathematical Sciences 1C
PQB250	Mechanics and Electromagnetism

PQB251	Waves and Optics
	Plus either:
MAB111	Mathematical Sciences 1B
	Or
MAB220	Computational Mathematics 1

MAB311	Advanced Calculus
PQB350	Thermodynamics of Solids and Gases
	Plus TWO other unit selected according to the co-major requirements

Year 2, Semester 2 *

PQB450	Energy, Fields and Radiation
PQB451	Electronics and Instrumentation
	Plus TWO other units selected according to the co-major requirements

Year 3, Semester 1 *

PQB550	Quantum and Condensed Matter Physics
PQB551	Physical Analytical Techniques
	Plus TWO other units selected according to the co-major requirements

Year 3, Semester 2 *

PQB650	Advanced Theoretical Physics
PQB651	Experimental Physics
	Plus TWO other units selected according to the co-major requirements

Recommended Co-majors:

Astrophysics, Mathematics

* Elective Unit for all Majors:

| SCB500 | Industry Project |
| NOTE: | 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. |

Course structure - Co-major in Applied Geology (Compatible with Geoscience Major only)

| NOTES: | - In the full-time course structure each of the two electives available in the course need to be selected in the relevant semesters to total 4 units per semester. |
| | - Select SIX appropriate units from the following program: |

Year 2, Semester 1

| NQB302 | Earth Surface Systems |
| UDB281 | Geographic Information Systems |

Year 2, Semester 2

| NQB403 | Soils and the Environment |
| NQB413 | Stratigraphy |

Year 3, Semester 1

| NQB503 | Spatial Analysis of Environmental Systems |
| NQB611 | Economic Geology |

Year 3, Semester 2

	Choose one from:
NQB612	Basin Analysis and Petroleum Geology
NQB613	Plate Tectonics and Advanced Structural Geology
NQB614	Groundwater Systems

Recommended Majors:

This co-major is compatible with Geoscience Major only

Course structure - Co-major in Astrophysics (Compatible with Physics major only)

Year 1, Semester 1

Units as per Physics major

Year 1, Semester 2

Units as per Physics major

Year 2, Semester 1

| PCB593 | Digital Image Processing |
| PQB360 | Global Energy Balance and Climate Change |

Year 2, Semester 2

| PQB460 | Astrophysics 1 |
| | Plus Elective |

Year 3, Semester 1

| MAB312 | Linear Algebra |
| | Plus Elective |

Year 3, Semester 2

PQB661	Lasers and Photonics
	Plus either:
MMB451	Energy Management
	Or
PQB660	Astrophysics 2

Recommended Majors:

This co-major is compatible with Physics major only

Course structure - Co-major in Biodiversity (compatible with any Science major)

| NOTES: | - In the full-time course structure each of the two electives available in the course need to be selected in the relevant semesters to total 4 |

units per semester.

- Select SIX appropriate units from the following program:

Year 2, Semester 1

LQB386	Microbial Structure and Function
NQB322	Invertebrate Biology
NQB323	Plant Biology

Year 2, Semester 2

LQB489	Plant Physiology and Cell Biology
NQB403	Soils and the Environment
NQB423	Vertebrate Biology

Year 3, Semester 1

NQB502	Field Mapping and Monitoring of Natural Resources
NQB503	Spatial Analysis of Environmental Systems

Year 3, Semester 2

NQB601	Sustainable Environmental Management

Recommended Majors:

This co-major is compatible with any Science major

Course structure - Co-major in Chemistry for Industry (compatible with Chemistry major only)

Year 1, Semester 1

Units as per Chemistry major

Year 1, Semester 2

Units as per Chemistry major

Year 2, Semester 1

PQB313	Analytical Chemistry For Industry
	Plus Elective

Year 2, Semester 2

PQB404	Nanotechnology and Nanoscience
PQB423	Process Principles

Year 3, Semester 1

PQB513	Instrumental Analysis
PQB525	Unit Operations

Year 3, Semester 2

PQB623	Chemistry in Industry and Technology
	Plus Elective

Recommended Majors:

This co-major is compatible with Chemistry major only

Course structure - Co-major in Life Science Technologies (compatible with any Life Science major)

Year 1, Semester 1

Units as per selected major

Year 1, Semester 2

Units as per selected major

Year 2, Semester 1

LQB388	Medical Physiology 1
	Plus either:
LQB383	Molecular and Cellular Regulation
	Or
LQB386	Microbial Structure and Function

Year 2, Semester 2

LQB488	Medical Physiology 2
	Or
LQB489	Plant Physiology and Cell Biology

Year 3, Semesters 1 and 2

	Select THREE units only from:
LQB582	Biomedical Research Technologies
LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation
LQB588	Applied Physiology
LQB681	Biochemical Research Skills
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions
LQB686	Microbial Technology and Immunology

Recommended Majors:

This co-major is compatible with any Life Science major (ie Biochemistry, Biotechnology, Microbiology)

Course structure - Co-major in Mathematics (compatible with any Science major)

Please consult the Mathematics coordinator, Dr Scott McCue (Email: scott.mccue@qut.edu.au) and the MA54 Bachelor of Mathematics course structure

Course structure - Co-major in Aviation (Subject to Timetable availability)

Suitable aviation studies (an approved Associate Diploma in aviation or equivalent) can be accepted as a co-major within the Bachelor of Applied Science course SC01. A total of 96 credit points can be credited for the aviation studies; this is based on 72 credit points for the co-major plus an additional 24 credit points generally required to underpin a co-major.

In the BAppSc with aviation, students can either (a) study for the BAppSc degree and the

aviation Associate Diploma concurrently, or (b) obtain credit for the SC01 course for an approved Associate Diploma in aviation that had been completed prior to gaining entry to the SC01 course.

(a) Students who wish to study for the BAppSc and the aviation Associate Diploma concurrently are required to apply to an accredited flying school or TAFE college for entry to the Associate Diploma. The aviation studies are undertaken at the same time as the SC01 course. This joint program generally requires at least four years.

(b) Students who have already completed an approved Associate Diploma prior to admission to the SC01 course will be granted 96 credit points towards the BAppSc degree.

Course structure - Co-major in Corporate IT Systems (Subject to Timetable availability)

Year 1, Semester 1
Units as per selected major

Year 1, Semester 2
Units as per selected major

Years 2 and 3, Semester 1
| INB120 | Corporate Systems |
| INB220 | Business Analysis |

Years 2 and 3, Semester 2
INB103	Industry Insights
INB123	Project Management Practice
INB330	Information Management

Recommended Majors:
This co-major is compatible with any Science major

Course structure - Co-major in Environmental Engineering Studies (Subject to Timetable availability)

Year 1, Semester 1
Units as per selected major

Year 1, Semester 2
Units as per selected major

Years 2 and 3, Semester 1
| ENB380 | Environmental Law and Assessment |
| UDB266 | Planning Processes and Consultations |

Years 2 and 3, Semester 2
BEB200	Introducing Sustainability
ENB274	Design of Environmentally Sustainable Systems
ENB383	Environmental Resource Management
UDB164	Population and Urban Studies

Recommended Majors:
This co-major is compatible with any Science major

Course structure - Co-major in Ethics and Human Rights (Subject to Timetable availability)

Year 1, Semester 1
Units as per selected major

Year 1, Semester 2
Units as per selected major

Years 2 and 3, Semester 1
| HHB114 | Introduction To Human Rights And Ethics |

plus 2 units in consultation with the Course Coordinator

Years 2 and 3, Semester 2
HHB266	Ethical Decision Making
HHB269	Ethics, Technology And The Environment
HHB271	Ethical Theory

Recommended Major:
This co-major is compatible with any Science major

Course structure - Co-major in Foreign Languages (Subject to Timetable availability)

Year 1, Semester 1
Units as per selected major

Year 1, Semester 2
Units as per selected major

Years 2 and 3, Semester 1 and 2
SIX units in French, German, Indonesian or Japanese (with at least 4 units at advanced level). Note: these units may be undertaken at UQ or Griffith Uni

Recommended Majors:
This co-major is compatible with any Science major

Course structure - Co-major in Games Technology (Subject to Timetable availability)

Year 1, Semester 1
Units as per selected major

Year 1, Semester 2
Units as per selected major

Select a total of 6 units from Years 2 and 3, Semesters 1 and 2:

Years 2 and 3, Semester 1

INB270	Programming
INB304	Special Topic 3
INB370	Software Development
INB371	Data Structures and Algorithms
INB382	Real Time Rendering Techniques

Years 2 and 3, Semester 2

INB270	Programming
INB304	Special Topic 3
INB381	Modelling and Animation Techniques
MAB281	Mathematics for Computer Graphics

Recommended Majors:

This co-major is compatible with any Mathematics or Physics major

Course structure - Co-major in Geography (Subject to Timetable availability)

Year 1, Semester 1

Units as per selected major

Year 1, Semester 2

Units as per selected major

Years 2 and 3, Semester 1

HHB127	Environment And Society
HHB232	Survey Methods
HHB250	Australian Geographical Studies

Years 2 and 3, Semester 2

HHB228	Environmental Hazards
HHB251	Australian Resource Management
HHB269	Ethics, Technology And The Environment

Recommended Majors:

This co-major is compatible with any Natural Resouce Science major

Course structure - Co-major in Journalism (Subject to Timetable availability)

Year 1, Semester 1

Units as per selected major

Year 1, Semester 2

Units as per selected major

Years 2 and 3, Semester 1

KJB101	Digital Journalism
KJB120	Newswriting
KJB239	Journalism Ethics and Issues

Years 2 and 3, Semester 2

| KFB205 | Fashion and Style Journalism |

| KJB224 | Feature Writing |
| KJB280 | International Journalism |

Recommended Majors:

This co-major is compatible with any Science major

Course structure - Co-major in Management (Subject to Timetable availability)

Year 1, Semester 1

Units as per selected major

Year 1, Semester 2

Units as per selected major

Years 2 and 3, Semesters 1 and 2

SIX units from:

BSB115	Management
MGB200	Leading Organisations
MGB210	Managing Operations
MGB223	Entrepreneurship and Innovation
MGB309	Strategic Management

Plus either:

| MGB310 | Sustainability in A Changing Environment |

or

| MGB225 | Intercultural Communication and Negotiation Skills |

Recommended Majors:

This co-major is compatible with any Science major

Course structure - Co-major in Marketing (Subject to Timetable availability)

Year 1, Semester 1

Units as per selected major

Year 1, Semester 2

Units as per selected major

Years 2 and 3, Semesters 1 and 2

AMB200	Consumer Behaviour
AMB201	Marketing and Audience Research
AMB240	Marketing Planning and Management
AMB202	Integrated Marketing Communication
AMB335	E-marketing Strategies
AMB336	International Marketing
AMB340	Services Marketing
BSB126	Marketing

Recommended Majors:

This co-major is compatible with any Science major

Course structure - Co-major Music (Subject to Timetable availability)

Year 1, Semester 1
Units as per selected major

Year 1, Semester 2
Units as per selected major

Years 2 and 3, Semester 1
KMB003	Sex Drugs Rock 'n' roll
KMB004	World Music
KMB105	Music and Sound Technology

Years 2 and 3, Semester 2
KMB106	Music and Sound for Multimedia
KMB107	Sound, Image, Text
KMB108	Sound Recording and Acoustics

Recommended Majors:
This co-major is compatible with any Science major

Course structure - Co-major in Nutrition (compatible with any Life Science major

Year 1, Semester 1
Units as per selected major

Year 1, Semester 2
Units as per selected major

Years 2 and 3, Semester 1
LQB388	Medical Physiology 1
PUB405	Nutrition Science
PUB474	Food Science

Years 2 and 3, Semester 2
LQB481	Biochemical Pathways and Metabolism
LQB488	Medical Physiology 2
PUB201	Food and Nutrition

Recommended Majors:
This co-major is compatible with Life Science majors

Course structure - Co-major in Psychology (Subject to Timetable availability)

Year 1, Semester 1
Units as per selected major

Year 1, Semester 2
Units as per selected major

Years 2 and 3, Semester 1

PYB101	Introduction to Psychology 1A
PYB205	Social Psychology
PYB304	Physiological Psychology

Years 2 and 3, Semester 2
PYB007	Interpersonal Processes and Skills
PYB203	Developmental Psychology
PYB204	Perception and Cognition

Recommended Majors:
This co-major is compatible with any Science major

Course structure - Co-major in Spatial Science (Subject to Timetable availability)

Year 1, Semester 1
Units as per selected major

Year 1, Semester 2
Units as per selected major

Years 2 and 3, Semester 1
UDB181	Geospatial Positioning and GPS
UDB281	Geographic Information Systems
UDB381	Geospatial Mapping
UDB387	Spatial and Land Information Management

Years 2 and 3, Semester 2
UDB182	Surveying
UDB282	Remote Sensing

Recommended Majors:
This co-major is compatible with any Science majors

Course structure - Additional Co-majors - you may choose your co-major from one of the Majors

Biochemistry
SIX of the units in the Biochemistry major

Biotechnology
SIX of the units in the Biotechnology major

Chemistry
SIX of the units in the Chemistry major

Ecology
SIX of the units in the Ecology major

Environmental Science
SIX of the units in the Environmental Science major

Forensic Science

SIX of the units in the Forensic Science major

Geoscience

SIX of the units in the Geoscience major

Mathematics

SIX of the units in the Mathematics majors

Microbiology

SIX of the units in the Microbiology major

Physics

SIX of the units in the Physics major

Potential Careers:

Actuary, Air Traffic Controller, Analytical Chemist, Astrophysicist, Biochemist, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Database Manager, Ecologist, Environmental Scientist, Exploration Geologist, Forensic Biologist, Forensic Chemist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, Industrial Chemist, Laboratory Technician (Chemistry), Marine Scientist, Mathematician, Medical Biotechnologist, Medical Physicist, Microbiologist, Mine Geologist, Molecular Biologist, Natural Resource Scientist, Pharmaceutical Research Scientist, Physicist, Plant Biotechnologist, Population Ecologist, Programmer, Quantitative Analyst, Research and Development Chemist, Statistician, Virologist.

Bachelor of Applied Science & Bachelor of Applied Science (Honours) - Dean's Scholars Accelerated Honours Program (SC01 + SC60)

Year offered: 2009
Admissions: Yes
CRICOS code: 003502J/009041G
Course duration (full-time): 3 Years (plus initial summer term)
Domestic fees (indicative): 2009: CSP $3,694 (indicative) per semester
Domestic Entry: February: Fixed Closing Date- 28 November 2008.
International Entry: February: Fixed Closing Date- 28 November 2008. This course is only available to international students completing Year 12 in Australia.
QTAC code: 418042
Past rank cut-off: 99 plus successful interview. Please refer to Additional Entry Requirements.
Past OP cut-off: 1 plus successful interview. Please refer to Additional Entry Requirements.
Assumed knowledge: English (4, SA) and Maths B (4, VHA) plus two (2) of Biological Science, Chemistry, Earth Science, Maths C or Physics (4, VHA)
Total credit points: 384 [BAppSc 288 cp and BAppSc(Hons) 96 cp]
Course coordinator: Dr Dann Mallet
Discipline coordinator: Associate Professor John Aaskov (Life Sciences); Dr Dann Mallet (Mathematics); Associate Professor David Gust (Natural Resource Sciences); Dr John McMurtrie (Physical and Chemical Sciences - Chemistry); Dr Dmitri Gramotnev (Physical and Chemical Sciences - Physics)
Campus: Gardens Point

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The 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 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.

Additional Entry Requirements

Successful interview.

Applicants will be sent interview information by QUT Faculty of Science progressively from late October.

Fixed Closing Date

Applications for this program will close on **28 November**.

Professional Recognition

As a graduate of the 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.

Scholarships

Students who are accepted into the Dean's Scholars Honours Program are eligible for a $9,000 scholarship paid over three years.

Career Outcomes

As a student in the Dean's Scholars Accelerated Honours Program you will choose one of the following ten 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, Mathematics, Microbiology, Physics.

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

Course Structure

As a student in the Dean's Scholars Accelerated Honours Program you will choose one of the majors available through the Bachelor of Applied Science (SC01) course. You will also choose a co-major to accompany your major area of study.

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.

Contact Details

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Discipline Coordinators

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Physical & Chemical Sciences - Physics
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Deferment
QUT's deferment policy does not apply to this course.

OP Guarantee
The OP Guarantee does not apply to this course.

Domestic student tuition fee (Dfee) places
Undergraduate domestic full fee places (Dfee) are not available in this course. Tuition fees are only applicable to currently enrolled students who were unable to comply regulations regarding their original Commonwealth Supported place (i.e. failure to lodge an eCAF, has consumed of other their Student Learning Entitlement etc.) and who have been invited and accepted to continue as a fee-paying student.

Course structure - Majors in Biochemistry, Biotechnology and Microbiology

Year 1, Summer Term (24 cp)
Dean's Scholars Program enrichment unit:

SCB301	Science for Dean's Scholars

Year 1, Semester 1 (60 cp)
Dean's Scholars Program enrichment unit:

SCB303	Tutorial Program for Dean's Scholars

Normal BAppSc and BAppSc(Hons) units: BAppSc Coursework (48 cp)

Year 1, Semester 2 (60 cp)
Dean's Scholars Program enrichment unit:

SCB401	Research Methods for Dean's Scholars

Normal BAppSc and BAppSc(Hons) units: BAppSc Coursework (48 cp)

Year 2, Semester 1 (72 cp)
Dean's Scholars Program enrichment unit:

SCB501-1	Research Project for Dean's Scholars

Normal BAppSc and BAppSc(Hons) units: BAppSc Coursework (48 cp)

Year 2, Semester 2 (60 cp)
Normal BAppSc and BAppSc(Hons) units: BAppSc Coursework (48 cp)

Normal BAppSc and BAppSc(Hons) unit:

LSB657	Perspectives in Life Science

Year 3, Semester 1 (60 cp) and Semester 2 (48 cp)
Normal BAppSc and BAppSc(Hons) units: BAppSc + BAppSc(Hons) Coursework (12cp + 36 cp respectively)

Normal BAppSc and BAppSc(Hons) units: BAppSc(Hons) Research (60 cp)

Course structure - Major in Chemistry

Year 1, Summer Term (24 cp)
Dean's Scholars Program enrichment unit:

SCB301	Science for Dean's Scholars

Year 1, Semester 1 (60 cp)
Dean's Scholars Program enrichment unit:

SCB303	Tutorial Program for Dean's Scholars

Normal BAppSc and BAppSc(Hons) units: BAppSc Coursework (48 cp)

Year 1, Semester 2 (60 cp)
Dean's Scholars Program enrichment unit: Elective (12 cp)

Normal BAppSc and BAppSc(Hons) units: BAppSc Coursework (48 cp)

Year 2, Semester 1 (60 cp)
Dean's Scholars Program enrichment unit:

SCB401	Research Methods for Dean's Scholars

Normal BAppSc and BAppSc(Hons) units: BAppSc Coursework (48 cp)

Year 2, Semester 2 (72 cp)

Dean's Scholars Program enrichment unit:

SCB501-1 Research Project for Dean's Scholars

Normal BAppSc and BAppSc(Hons) units:
BAppSc Coursework (48 cp)

Year 3, Semester 1 (60 cp) and Semester 2 (48 cp)

Normal BAppSc and BAppSc(Hons) units:
BAppSc + BAppSc(Hons) Coursework (12 cp +
36 cp respectively)

Normal BAppSc and BAppSc(Hons) units:
BAppSc(Hons) Research (60 cp)

Course structure - Major in Mathematics

Year 1, Summer Term (24 cp)

Dean's Scholars Program enrichment unit (MS
module + MA module + one of the PH, CH, and
LS modules):

SCB301 Science for Dean's Scholars

Year 1, Semester 1 (60 cp)

Normal BAppSc and BAppSc(Hons) units:
BAppSc Coursework (60 cp)

Year 1, Semester 2 (60 cp)

Normal BAppSc and BAppSc(Hons) units:
BAppSc Coursework (60 cp)

Year 2, Semester 1 (60 cp)

Normal BAppSc and BAppSc(Hons) units:
BAppSc Coursework (60 cp)

Year 2, Semester 2 (60 cp)

Normal BAppSc and BAppSc(Hons) units:
BAppSc Coursework (36 cp)

Dean's Scholars Program enrichment unit:

SCB501-1 Research Project for Dean's Scholars

Year 3, Semester 1 (60 cp) and Semester 2 (60 cp)

Normal BAppSc and BAppSc(Hons) units:
BAppSc + BAppSc(Hons) Coursework (24 cp +
60 cp respectively)

Normal BAppSc and BAppSc(Hons) units:
BAppSc(Hons) Research (36 cp)

Course structure - Major in Physics

Year 1, Summer Term (24 cp)

Dean's Scholars Program enrichment unit:

SCB301 Science for Dean's Scholars

Year 1, Semester 1 (60 cp)

Dean's Scholars Program enrichment unit:

SCB303 Tutorial Program for Dean's Scholars

Normal BAppSc and BAppSc(Hons) units:
BAppSc Coursework (48 cp)

Year 1, Semester 2 (60 cp)

Dean's Scholars Program enrichment unit:
Elective (12 cp)

Normal BAppSc and BAppSc(Hons) units:
BAppSc Coursework (48 cp)

Year 2, Semester 1 (60 cp)

Dean's Scholars Program enrichment unit
(approved Physics elective)

Normal BAppSc and BAppSc(Hons) units:
BAppSc Coursework (48 cp)

Year 2, Semester 2 (72 cp)

Dean's Scholars Program enrichment unit:

SCB501-1 Research Project for Dean's Scholars

Normal BAppSc and BAppSc(Hons) units:
BAppSc Coursework (24 cp)

Year 3, Semester 1 (60 cp) and Semester 2 (48 cp)

Normal BAppSc and BAppSc(Hons) units:
BAppSc + BAppSc(Hons) Coursework (12 cp +
36 cp respectively)

Normal BAppSc and BAppSc(Hons) units:
BAppSc(Hons) Research (60 cp)

Potential Careers:

Actuary, Air Traffic Controller, Analytical Chemist,
Astrophysicist, Biochemist, Biologist, Biotechnologist, Cell
Biologist, Chemist, Chemist Industrial, Coastal Scientist,
Conservation Biologist, Database Manager, Ecologist,
Environmental Scientist, Exploration Geologist, Forensic
Chemist, Forensic Scientist, Geologist, Geophysicist,
Geoscientist, Health Physicist, Hydrogeologist,
Immunologist, Industrial Chemist, Laboratory Technician
(Chemistry), Marine Scientist, Mathematician, Medical
Biotechnologist, Medical Physicist, Microbiologist, Mine
Geologist, Molecular Biologist, Natural Resource Scientist,
Pharmaceutical Research Scientist, Physicist, Plant
Biotechnologist, Population Ecologist, Programmer,
Quantitative Analyst, Research and Development Chemist,
Statistician, Virologist.

Bachelor of Applied Science/Bachelor of Mathematics (SC20)

Year offered: 2009
Admissions: Yes
CRICOS code: 049434C
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,706 (indicative) per semester
International Fees (per semester): 2009: $11,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February and July
QTAC code: 418712
Past rank cut-off: 77
Past OP cut-off: 12
OP Guarantee: Yes
Assumed knowledge: English (4, SA) and Maths B (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3138 2000 or email study@qut.com
Total credit points: 384
Standard credit points per full-time semester: 48
Course coordinator: Dr Perry Hartfield (Science); Associate Professor Graeme Pettet (Mathematics)
Campus: Gardens Point

Recommended Study

Maths C and knowledge of at least one of the sciences. For the majors in biochemistry, biotechnology, forensic science, and microbiology - Biological Science and Chemistry are recommended.

Career Opportunities

This four-year double degree provides students with the opportunity to integrate studies in a science area with mathematics. This combination will lead to enhanced job opportunities for graduates and also provide a very sound background for students proceeding to postgraduate research studies in either a science discipline or mathematics.

Mathematics is vital for much scientific research and it is also becoming increasingly important for employees in many science-based careers to have a good background in mathematics and statistics. There are many jobs advertised where employers are ideally looking for applicants with skills and knowledge in science and mathematics. Some examples are:

Natural resource management - obtaining an accurate estimate of fish populations and predicting sustainable fishing limits requires complex mathematical and statistical modelling

Agriculture management - from climate modelling down to the individual paddock level, the interaction between forecast crop yields and prices, crop and harvest scheduling and environmental impacts

Genetics - including gene sequencing and quantitative genetics

Chemistry and Biochemistry - operations research (scheduling) and quality management techniques benefit management of a chemical testing laboratory or chemicals business; computational and applied mathematics and scientific computation and visualisation relate to research areas such as drug design using combinatorial chemistry

Infection and disease control - uses statistics and mathematical modelling

Bioinformatics - involves analysing and modelling data arising in molecular biology, genome sequencing and gene networks

Developing new physical measurement and imaging techniques - needs applied and computational mathematics

Course Structure

Mathematics provides a very precise way of describing our world and activities within it. It is used to understand and formulate current knowledge, to develop new products and processes and to assist with predicting changes which may occur under various scenarios. Mathematical techniques are used extensively in conjunction with all areas of science.

Graduates will have well-developed analytical and problem-solving skills and also practical hands-on experience in the science area of their choice. They will have the ability to use mathematical and statistical techniques across a wide range of applications and to communicate effectively with others.

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 Inc and the Australian Society for Operations Research is available. For professional recognition relating to the science majors refer to Bachelor of Applied Science (SC01).

Contact Details

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Mathematics Coordinator

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Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Course structure

Students must complete at least (a) 192 credit points (16 twelve credit point units) of Mathematics units and (b) 192 credit points (16 twelve credit point units) of Science units, according to the requirements as follows:

Level 1 Units:

Students must complete the following Level 1 Mathematics units:

MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB220	Computational Mathematics 1
NOTE:	MAB100 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 must complete the following Level 1 Science Foundation units:

SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

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

Level 2 and 3 Mathematics Units:

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

Level 2 and 3 Science Units:

At least 96 credit points (8 twelve-credit point units) must be taken from Level 2 and Level 3 Science units with at least 48 credit points (4 twelve credit point units) from Level 3 Science units. The science units must meet the advanced level requirements of one of the following majors of the SC01 Bachelor of Applied Science course: Biochemistry; Biotechnology; Chemistry; Ecology; Environmental Science; Forensic Science; Geoscience: Microbiology or Physics.

Science Elective Units:

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.

Science Units: Biochemistry Major (Mandatory units)

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	TWO Mathematics Units

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
	TWO Mathematics units

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Science Elective unit
	TWO Mathematics units

Year 2, Semester 2

SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications
	TWO Mathematics units

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
	TWO Mathematics units

Year 3, Semester 2

LQB481	Biochemical Pathways and Metabolism
LQB483	Molecular Biology Techniques
	TWO Mathematics units

Year 4, Semester 1

LQB581	Functional Biochemistry
LQB582	Biomedical Research Technologies
	TWO Mathematics units

Year 4, Semester 2

LQB681	Biochemical Research Skills
LQB682	Protein Biochemistry and Bioengineering
	TWO Mathematics units

Science Units: Biotechnology Major (Mandatory units)

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	TWO Mathematics units

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
	TWO Mathematics units

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Science Elective unit
	TWO Mathematics units

Year 2, Semester 2

SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications
	TWO Mathematics units

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB383	Molecular and Cellular Regulation
	TWO Mathematics units

Year 3, Semester 2

LQB483	Molecular Biology Techniques
LQB484	Introduction to Genomics and Bioinformatics
	TWO Mathematics units

Year 4, Semester 1

	TWO units from:
LQB583	Genetic Research Technology
LQB584	Medical Cell Biology
LQB585	Plant Genetic Manipulation
	TWO Mathematics units

Year 4, Semester 2

	TWO units from:
LQB682	Protein Biochemistry and Bioengineering
LQB684	Medical Biotechnology
LQB685	Plant Microbe Interactions
	TWO Mathematics units

Science Units: Chemistry Major (Mandatory units)

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	TWO Mathematics units

Year 1, Semester 2

SCB121	Chemistry 2
SCB123	Physical Science Applications
	TWO Mathematics units

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Science Elective unit
	TWO Mathematics units

Year 2, Semester 2

SCB131	Experimental Chemistry
	Science Elective unit
	TWO Mathematics units

Year 3, Semester 1

PQB312	Analytical Chemistry For Scientists and Technologists
PQB331	Structure and Bonding
	TWO Mathematics units

Year 3, Semester 2

PQB401	Reaction Kinetics, Thermodynamics and Mechanisms
PQB442	Chemical Spectroscopy
	TWO Mathematics units

Year 4, Semester 1

PQB502	Materials Chemistry and Characterisation
PQB531	Organic Mechanisms and Synthesis
	TWO Mathematics units

Year 4, Semester 2

PQB631	Advanced Inorganic Chemistry
PQB642	Chemical Research
	TWO Mathematics units

Science Units: Ecology Major (Mandatory units)

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	TWO Mathematics units

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB122	Cell and Molecular Biology

TWO Mathematics units

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
	Science Elective unit
	TWO Mathematics units

Year 2, Semester 2	
NQB201	Planet Earth
NQB202	History of Life on Earth
	TWO Mathematics units

Year 3, Semester 1	
NQB302	Earth Surface Systems
NQB321	Ecology
	TWO Mathematics units

Year 3, Semester 2	
NQB421	Experimental Design
NQB422	Genetics and Evolution
	TWO Mathematics units

Year 4, Semester 1	
NQB521	Population Genetics and Molecular Ecology
NQB523	Population Management
	TWO Mathematics units

Year 4, Semester 2	
NQB622	Population Genetics
NQB623	Ecological Systems
	TWO Mathematics units

Science Units: Environmental Science Major (Mandatory units)

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	TWO Mathematics units

Year 1, Semester 2	
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
	TWO Mathematics units

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
SCB123	Physical Science Applications
	TWO Mathematics units

Year 2, Semester 2	
NQB202	History of Life on Earth
	Science Elective unit

TWO Mathematics units

Year 3, Semester 1	
NQB302	Earth Surface Systems
NQB321	Ecology
	TWO Mathematics units

Year 3, Semester 2	
NQB403	Soils and the Environment
NQB421	Experimental Design
	TWO Mathematics units

Year 4, Semester 1	
NQB501	Environmental Modelling
NQB502	Field Mapping and Monitoring of Natural Resources
	TWO Mathematics units

Year 4, Semester 2	
NQB601	Sustainable Environmental Management
NQB602	Environmental Chemistry
	TWO Mathematics units

Science Units: Forensic Science Major (Mandatory units)

Year 1, Semester 1	
SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	TWO Mathematics units

Year 1, Semester 2	
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology
	TWO Mathematics units

Year 2, Semester 1	
SCB110	Science Concepts and Global Systems
	Science Elective unit
	TWO Mathematics units

Year 2, Semester 2	
SCB123	Physical Science Applications
SCB131	Experimental Chemistry
	TWO Mathematics units

Year 3, Semester 1	
LQB383	Molecular and Cellular Regulation
SCB384	Forensic Sciences - From Crime Scene to Court
	TWO Mathematics units

Year 3, Semester 2	
JSB979	Forensic Scientific Evidence

PQB312	Analytical Chemistry For Scientists and Technologists
	TWO Mathematics units

Year 4, Semester 1

PQB513	Instrumental Analysis
PQB584	Forensic Physical Evidence
	TWO Mathematics units

Year 4, Semester 2

LQB680	Forensic DNA Profiling
PQB684	Forensic Analysis
	TWO Mathematics units

Science Units: Geoscience Major (Mandatory units)

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	TWO Mathematics units

Year 1, Semester 2

NQB201	Planet Earth
SCB123	Physical Science Applications
	TWO Mathematics units

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Science Elective unit
	TWO Mathematics units

Year 2, Semester 2

NQB202	History of Life on Earth
SCB222	Exploration of the Universe
	TWO Mathematics units

Year 3, Semester 1

NQB311	Mineralogy
NQB314	Sedimentary Geology
	TWO Mathematics units

Year 3, Semester 2

NQB411	Petrology of Igneous and Metamorphic Rocks
NQB412	Structural Geology and Field Methods
	TWO Mathematics units

Year 4, Semester 1

NQB502	Field Mapping and Monitoring of Natural Resources
NQB513	Geophysics
	TWO Mathematics units

Year 4, Semester 2

NQB602	Environmental Chemistry
NQB612	Basin Analysis and Petroleum Geology
	TWO Mathematics units

Science Units: Microbiology Major (Mandatory units)

Year 1, Semester 1

SCB111	Chemistry 1
SCB112	Cellular Basis of Life
	TWO Mathematics units

Year 1, Semester 2

SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
	TWO Mathematics units

Year 2, Semester 1

SCB110	Science Concepts and Global Systems
	Science Elective unit
	TWO Mathematics units

Year 2, Semester 2

SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications
	TWO Mathematics units

Year 3, Semester 1

LQB381	Biochemistry: Structure and Function
LQB386	Microbial Structure and Function
	TWO Mathematics units

Year 3, Semester 2

LQB483	Molecular Biology Techniques
LQB486	Clinical Microbiology 1
	TWO Mathematics units

Year 4, Semester 1

LQB586	Clinical Microbiology 2
LQB587	Applied Microbiology 1: Water, Air and Soil
	TWO Mathematics units

Year 4, Semester 1

LQB686	Microbial Technology and Immunology
LQB687	Applied Microbiology 2: Food and Quality Assurance
	TWO Mathematics units

Science Units: Physics Major (Mandatory units)

Year 1, Semester 1

SCB110	Science Concepts and Global Systems
SCB111	Chemistry 1
	TWO Mathematics units

Year 1, Semester 2

PQB250	Mechanics and Electromagnetism	
	Science Elective unit	
	TWO Mathematics units	

Year 2, Semester 1

SCB112	Cellular Basis of Life	
	Science Elective unit	
	TWO Mathematics units	

Year 2, Semester 2

PQB251	Waves and Optics	
	Science Elective unit	
	TWO Mathematics units	

Year 3, Semester 1

PQB350	Thermodynamics of Solids and Gases	
	Level 2 Science Elective unit	
	TWO Mathematics units	

Year 3, Semester 2

PQB450	Energy, Fields and Radiation	
PQB451	Electronics and Instrumentation	
	TWO Mathematics units	

Year 4, Semester 1

PQB550	Quantum and Condensed Matter Physics	
PQB551	Physical Analytical Techniques	
	TWO Mathematics units	

Year 4, Semester 2

PQB650	Advanced Theoretical Physics	
PQB651	Experimental Physics	
	TWO Mathematics units	

Mathematics Component (Mandatory units) (WITH Maths C)

For Students with at least Sound Achievement in both Senior Mathematics B and C

Year 1, Semester 1

MAB101	Statistical Data Analysis 1	
MAB111	Mathematical Sciences 1B	
	Plus TWO units selected according to the Science major requirements	

Year 1, Semester 2

MAB112	Mathematical Sciences 1C	
MAB210	Statistical Modelling 1	
	Plus TWO units selected according to the Science major requirements	

Year 2, Semester 1

MAB220	Computational Mathematics 1	
MAB311	Advanced Calculus	
	Plus TWO units selected according to the Science major requirements	

Year 2, Semester 2

	TWO Mathematics unit	
	Plus TWO units selected according to the Science major requirements	

Year 3, Semester 1

MAB312	Linear Algebra	
	ONE Mathematics unit	
	Plus TWO units selected according to the Science major requirements	

Year 3, Semester 2

	TWO Mathematics units	
	Plus TWO units selected according to the Science major requirements	

Year 4, Semester 1

	TWO Level 3 Mathematics units	
	Plus TWO units selected according to the Science major requirements	

Year 4, Semester 2

	TWO Level 3 Mathematics units	
	Plus TWO units selected according to the Science major requirements	

Mathematics Component (Mandatory units) (WITHOUT Maths C)

For Students with Sound Achievement or Better in Senior Mathematics B Only

Year 1, Semester 1

MAB100	Mathematical Sciences 1A	
MAB101	Statistical Data Analysis 1	
	Plus TWO unit selected according to the Science major	

Year 1, Semester 2

MAB111	Mathematical Sciences 1B	
MAB112	Mathematical Sciences 1C	
	Plus TWO unit selected according to the Science major	

Year 2, Semester 1

MAB220	Computational Mathematics 1	
MAB311	Advanced Calculus	
	Plus TWO units selected according to the Science major	

Year 2, Semester 2

MAB210	Statistical Modelling 1	

ONE Mathematics unit

Plus TWO unit selected according to the Science major

Year 3, Semester 1

MAB312	Linear Algebra
	ONE Mathematics unit
	Plus TWO units selected according to the Science major

Year 3, Semester 2

	TWO Mathematics units
	Plus TWO units selected according to the Science major

Year 4, Semester 1

	TWO Level 3 Mathematics units
	Plus TWO units selected according to the Science major

Year 4, Semester 2

	TWO Level 3 Mathematics units
	Plus TWO units selected according to the Science major

Mathematics Units

Level 1

MAB100	Mathematical Sciences 1A
MAB101	Statistical Data Analysis 1
MAB111	Mathematical Sciences 1B
MAB112	Mathematical Sciences 1C
MAB210	Statistical Modelling 1
MAB220	Computational Mathematics 1

Level 2

MAB311	Advanced Calculus
MAB312	Linear Algebra
MAB313	Mathematics of Finance
MAB314	Statistical Modelling 2
MAB315	Operations Research 2
MAB413	Differential Equations
MAB414	Applied Statistics 2
MAB420	Computational Mathematics 2
MAB422	Mathematical Modelling
MAB461	Discrete Mathematics
MAB480	Introduction to Scientific Computation
MAB481	Visualisation and Data Analysis

Level 3

	You must complete at least four units from:
MAB521	Applied Mathematics 3
MAB522	Computational Mathematics 3

MAB524	Statistical Inference
MAB525	Operations Research 3A
MAB533	Statistical Techniques
MAB536	Time Series Analysis
MAB613	Partial Differential Equations
MAB623	Financial Mathematics
MAB624	Applied Statistics 3
MAB625	Operations Research 3B
MAB640	Industry Project
MAB672	Advanced Mathematical Modelling
MAB681	Advanced Visualisation and Data Analysis

Science Elective Units

The number of elective units will depend upon the major selected. These elective units can be selected from Faculty of Science and Technology units - make sure you meet any prerequisites and don't take an incompatible unit. Some majors include alternative units and you could select an additional unit(s) from these.

Information on some possible Science elective units.

NQB201	Planet Earth
NQB202	History of Life on Earth
SCB120	Plant and Animal Physiology
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology
SCB123	Physical Science Applications
SCB131	Experimental Chemistry
SCB222	Exploration of the Universe
NOTE:	Other elective units may be found in the co-majors listed in the SC01 Course Summary Sheet.

Level 2 or 3 Elective Unit Suggestions for Physics Major

PQB360	Global Energy Balance and Climate Change
PQB460	Astrophysics 1
PQB660	Astrophysics 2

Potential Careers:

Actuary, Analytical Chemist, Astrophysicist, Biochemist, Bioinformatician, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Database Manager, Ecologist, Environmental Scientist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, Industrial Chemist, Laboratory Technician (Chemistry), Marine Scientist, Mathematician, Medical Biotechnologist, Medical Physicist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Physicist, Plant Biotechnologist, Population Ecologist, Programmer, Quantitative Analyst, Statistician, Virologist.

Bachelor of Biomedical Science (SC40)

Year offered: 2009
Admissions: Yes
CRICOS code: 052768K
Course duration (full-time): 3 Years
Course duration (part-time): 6 Years
Domestic fees (indicative): 2009: CSP $3,559 (indicative) per semester
International Fees (per semester): 2009: $11,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February
QTAC code: 418401
Past rank cut-off: 75
Past OP cut-off: 13
OP Guarantee: Yes
Assumed knowledge: English (4, SA), Maths B (4, SA) and Chemistry (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. CHEMISTRY: QUT unit Introductory Chemistry as a visiting student or QUT Continuing Professional Chemistry Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3864 2000 or email study@qut.com
Total credit points: 288
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Dr Catherine Dallemagne
Campus: Gardens Point

Career Opportunities

The Bachelor of Biomedical Science is a highly relevant and appropriate qualification for entry into postgraduate medicine. This course provides a solid foundation for the areas tested in GAMSAT, the entrance examination for postgraduate medicine. Many opportunities are also available for postgraduate study in science at QUT, including Honours and postgraduate courses in Life Sciences.

The Bachelor of Biomedical Science is also designed for students seeking a science-based qualification that will lead to career opportunities in medical biotechnology, medical microbiology, and clinical biochemistry fields.

Recommended Study

Biological Science is recommended.

Course Design

The Bachelor of Biomedical Science comprises first-year studies in chemistry, physics, anatomy, physiology and cell biology, providing a solid knowledge base for GAMSAT. Units in the second and third years combine advanced studies with theoretical, practical, and problem-solving skills. Several units in the area of humanities and applied health are an integral part of the course.

Students will be well prepared to sit GAMSAT which is designed to evaluate mastery and use of concepts in basic science as well as the acquisition of more general skills in problem solving, critical thinking and writing. The Bachelor of Biomedical Science provides a solid grounding in GAMSAT testing areas: reasoning in humanities and social sciences, written communication, reasoning in biological and physical sciences (including chemistry, biology and physics).

Professional Recognition

Depending on the subjects selected in the final year of the course, graduates will be eligible for membership of one or more of the following organisations: Australian Association of Clinical Biochemists, AusBiotech Ltd, Australian Society for Microbiology.

Contact Details
Course Coordinator

Dr Catherine Dallemagne
Phone: +61 7 3138 2561
Email: c.dallemagne@qut.edu.au

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Course structure - Full-time

Year 1, Semester 1	
MAB141	Mathematics and Statistics for Medical Science
PYB007	Interpersonal Processes and Skills
SCB111	Chemistry 1
SCB112	Cellular Basis of Life

Year 1, Semester 2	
LSB255	Human Anatomy
PCB150	Physics 1H
SCB121	Chemistry 2
SCB122	Cell and Molecular Biology

Year 2, Semester 1	
LQB383	Molecular and Cellular Regulation
LQB386	Microbial Structure and Function
LQB388	Medical Physiology 1
LSB325	Biochemistry

Year 2, Semester 2	
HHB114	Introduction To Human Rights And Ethics
LQB483	Molecular Biology Techniques

| LQB486 | Clinical Microbiology 1 |
| LSB425 | Quantitative Medical Science |

LQB583	Genetic Research Technology
LQB584	Medical Cell Biology
LQB586	Clinical Microbiology 2
LSB525	Clinical Biochemistry 1

Year 3, Semester 2

LQB488	Medical Physiology 2
LQB684	Medical Biotechnology
LSB625	Clinical Biochemistry 2
LSB658	Clinical Physiology

NOTE:

Students may substitute ONE unit from EACH of Year 3/Semesters 1 and 2 (or Year 2/Semester 2) with an approved pair of electives from the following list, providing that a MATCHING SET of science units is deleted: (eg [a] LQB583 and LQB684 OR [b] LSB525 and LSB625 OR [c] LQB486 and LQB586). The elective options are subject to timetabling and campus offerings.

null

HEALTH COUNSELLING

Semester 1:

| PYB012 | Psychology |

Semester 2:

| PYB208 | Counselling Theory and Practice 1 |

null

PUBLIC HEALTH

Semester 1:

PUB104	Australian Health Care Systems
	or
PUB326	Epidemiology

Semester 2:

PUB251	Contemporary Public Health
	or
PUB436	Evidence Based Practice

null

EXERCISE SCIENCE FOR PREVENTIVE MEDICINE

Semester 1:

| HMB271 | Foundations of Motor Control, Learning and Development |

Semester 2:

| HMB273 | Exercise Physiology 1 |

null

INDIGENOUS PERSPECTIVES

Semester 1:

| HHB123 | Indigenous Australian Culture Studies |

Semester 2:

| HHB276 | Indigenous Knowledge: Research Ethics and Protocols |

null

CONTEMPORARY ETHICS

Semester 1:

| HHB270 | Gene Technology And Ethics |

Semester 2:

| HHB269 | Ethics, Technology And The Environment |

null

EPIDEMIOLOGY AND INFECTIOUS DISEASES

Semester 1:

| PUB326 | Epidemiology |

Semester 2:

| LSB648 | Molecular Microbiology |

Course structure - Part-time

Year 1, Semester 1

| MAB141 | Mathematics and Statistics for Medical Science |
| SCB112 | Cellular Basis of Life |

Year 1, Semester 2

| LSB255 | Human Anatomy |
| SCB122 | Cell and Molecular Biology |

Year 2, Semester 1

| PYB007 | Interpersonal Processes and Skills |
| SCB111 | Chemistry 1 |

Year 2, Semester 2

| PCB150 | Physics 1H |
| SCB121 | Chemistry 2 |

Year 3, Semester 1

| LQB383 | Molecular and Cellular Regulation |
| LSB325 | Biochemistry |

Year 3, Semester 2

| LQB483 | Molecular Biology Techniques |
| LSB425 | Quantitative Medical Science |

Year 4, Semester 1

| LQB386 | Microbial Structure and Function |
| LQB388 | Medical Physiology 1 |

Year 4, Semester 2

| HHB114 | Introduction To Human Rights And Ethics |
| LQB486 | Clinical Microbiology 1 |

Year 5, Semester 1

LQB584	Medical Cell Biology
LQB586	Clinical Microbiology 2

Year 5, Semester 2

LQB488	Medical Physiology 2
LSB658	Clinical Physiology

Year 6, Semester 1

LQB583	Genetic Research Technology
LSB525	Clinical Biochemistry 1

Year 6, Semester 2

LQB684	Medical Biotechnology 2
LSB625	Clinical Biochemistry 2

Note for Years 5 and 6:

Students may substitute ONE unit from EACH of Year 4 Semester 2 and Year 5 Semester 1, OR Year 6 Semester 1 and Year 6 Semester 2 with an approved pair of electives from the list which appears under the Note for Year 3 in the Full-time course structure, providing that a MATCHING SET of science units is deleted: (eg [a] LQB583 and LQB684 OR [b] LSB525 and LSB625 OR [c] LQB486 and LQB586). The elective options are subject to timetabling and campus offerings.

Potential Careers:

Laboratory assistant, Laboratory Technician, Medicine (after further study), Research Assistant.

Bachelor of Pharmacy (SC45)

Year offered: 2009
Admissions: Yes
CRICOS code: 055902G
Course duration (full-time): 4 years
Domestic fees (indicative): 2009: CSP $3,579 (indicative) per semester
International Fees (per semester): 2009: $10,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February
International Entry: February IELTS 7.0 no subtest less than 6.0 (Quota applies)
QTAC code: 418512
Past rank cut-off: 93 Not all applicants with this rank were offered this course
Past OP cut-off: 5 Not all applicants within the OP 5 Band were offered this course
Assumed knowledge: English (4, SA), Maths B (4, SA) and Chemistry (4, SA)
Preparatory studies: MATHS: QUT unit Preparatory Mathematics as a visiting student or QUT Continuing Professional Education course Mathematics Bridging. CHEMISTRY: QUT unit Introductory Chemistry as a visiting student or QUT Continuing Professional Chemistry Bridging. ENGLISH: Successful completion of a year of full-time vocational or tertiary study. For further information contact 07 3864 2000 or email study@qut.com
Total credit points: 384
Standard credit points per full-time semester: 48
Course coordinator: Associate Professor Fraser Ross
Campus: Gardens Point

Recommended Study

Biological Science is recommended.

Career Opportunities

Pharmacists are employed in a range of settings including community pharmacies, hospitals, industry, regulatory and research roles. Australia is currently experiencing a shortage of trained pharmacists, particularly in hospital and community pharmacies. You can expect your skills to be in demand as the QUT Bachelor of Pharmacy focuses on these aspects of the pharmacy profession. You will also be well prepared to undertake postgraduate studies in pharmacy related areas.

As the first professional contacted for advice about health, community pharmacists frequently play a major role as health educators. Hospital pharmacists may work closely with doctors in a patient-care role, evaluate newly released medicines, coordinate clinical trials, or prepare medicines for patients requiring specialised treatments.

OP Guarantee

The OP Guarantee does not apply to this course.

Course Design

The Bachelor of Pharmacy comprises four years of study in areas ranging from pharmacy practice, pharmaceutics, pharmacology, drug metabolism, physiology and chemistry. You will also undertake professional practice units in QUT's on-campus dispensary and counselling facilities before embarking on a series of professional placements in hospitals and community pharmacy environments.

Special Course Requirements

1. **Hepatitis B Vaccination:** Prior to undertaking hospital placements students must be vaccinated for hepatitis B and must provide a post-vaccination pathological report or similar certification showing proof of immunity.

2. **Blue Card**: A current Blue Card authorised with QUT is required prior to commencing the clinical placement components in this course. Please read the Blue Card information (http://bluecard.qut.com) and ensure that you allow adequate time for processing your application and issuing of the card in order to avoid clinical experience delays.

Professional Recognition

Following graduation, approximately 12 months of pre-registration training performed under the supervision of a registered pharmacist is required to meet the registration requirements of the Pharmacists Board of Queensland. Graduates will be eligible for membership of a number of professional associations, including the Pharmaceutical Society of Australia (PSA), the Pharmacy Guild and the Society of Hospital Pharmacists of Australia (SHPA).

Why Choose this Course?

This course has been developed with significant input from pharmacists to incorporate latest practices and emerging trends. The inclusion of essential small business management skills will help you to operate effectively in your chosen setting.

Contact Details

Course Coordinator

Associate Professor Fraser Ross
Phone: +61 7 3138 2502
Email: fb.ross@qut.edu.au

Domestic student tuition fee (Dfee) places

Undergraduate domestic full fee places (Dfee) are not available in this course. Tuition fees are only applicable to currently enrolled students who were unable to comply regulations regarding their original Commonwealth Supported place (i.e. failure to lodge an eCAF, has consumed of other their Student Learning Entitlement etc.) and who have been invited and accepted to continue as a fee-paying student.

Deferment

QUT allows current Year 12 school leavers to defer their undergraduate admission offer for one year, or for six months if offered mid-year admission, except in courses using specific admission requirements such as questionnaires, folios, auditions, prior study or work experience.

Non-year 12 students may also request to defer their QTAC

offer on the basis of demonstrated special circumstances.

Find out more on deferment.

Course structure

Potential Careers:

Community Pharmacist, Hospital Pharmacist, Pharmaceutical Research Scientist.

Bachelor of Applied Science (Honours) (SC60)

Year offered: 2009
Admissions: Yes
CRICOS code: 009041G
Course duration (full-time): 1 Year
Course duration (part-time): 2 Years
Domestic fees (indicative): 2009: CSP $3,700 (indicative) per semester
International Fees (per semester): 2009: $11,500 (indicative) per semester *(subject to annual review)*
Domestic Entry: February and July
International Entry: February and July
Total credit points: 96
Standard credit points per full-time semester: 48
Course coordinator: Associate Professor Peter Mather
Discipline coordinator: Dr John Bartley (Chemistry); Dr David Hurwood (Ecology); Associate Professor Peter Mather (Environmental Science); Dr Gregg Webb (Geology); Associate Professor Terry Walsh (Life Science); Dr Troy Farrell (Mathematics); Dr Esa Jaatinen (Physics)
Campus: Gardens Point

Career Outcomes

The Bachelor of Applied Science (Honours) program is designed for graduates who have excelled in their degree from a recognised tertiary institution, with major studies in a relevant discipline. The course not only enhances your professional employability in your chosen discipline but also prepares you for a research career. The Honours qualification opens a direct pathway to postgraduate studies, qualifying you for entry into Doctor of Philosophy and Master of Applied Science courses.

Entry Requirements

To be eligible for admission, you should have completed QUT's Bachelor of Applied Science or equivalent and should have attained a grade point average (GPA) of at least 5 (on a 7-point scale), including grades of at least 5 in all units directly relevant to the proposed Honours program. Application for admission should normally be made at the end of the pass degree, or within 18 months of completing that degree.

If you do not satisfy the above conditions but who have demonstrated outstanding performance in only the final year of a degree, or your application is based on other factors including work experience or involvement in research, you may be admitted at the discretion of the Executive Dean of Faculty.

Please note that for the Mathematics major, other degrees with major studies in Mathematics (including Statistics) may provide suitable entry to the program.

Course Structure

The Honours year comprises coursework and a major research project supervised by QUT staff, in some cases in conjunction with local industry. Majors are offered in Chemistry, Ecology, Environmental Science, Geology, Life Science, Mathematics and Physics.

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.

Contact Details

Course Coordinator
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Discipline Coordinators

Chemistry
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Ecology
Dr David Hurwood
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Environmental Science
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Life Science
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Mathematics
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Email: t.farrell@qut.edu.au

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

Course structure - Major in Chemistry

PCB700-1	Research Project
PCB700-2	Research Project
PCB742	Elective Unit
PCB780-1	Advanced Topics in Chemistry 1

Year 1, Semester 2

PCB700-3	Research Project
PCB700-4	Research Project
PCB700-5	Research Project
PCB780-2	Advanced Topics in Chemistry 1
NOTE:	Students wishing to apply for entry to BAppSc(Hons) should consult with the contact person for the relevant science discipline before applying (see contact details link above).

Course structure - Major in Ecology, Environmental Science, Geology

Year 1, Semester 1

NRB720-1	Project
NRB730-1	Research Methods and Strategies
NRB730-2	Research Methods and Strategies
NRB735	Advanced Studies in Resource Sciences

Year 1, Semester 2

NRB720-2	Project
NRB720-3	Project
NRB720-4	Project
NRB720-5	Project
NOTE:	Students wishing to apply for entry into BAppSc(Hons) should consult with the contact person for the relevant science discipline before applying (see contact details link above).

Course structure - Major in Life Science

Year 1, Semester 1

LSB850-1	Research Strategies
LSB851-1	Readings in Life Science 1
LSB852-1	Project

Year 1, Semester 2

LSB850-2	Research Strategies
LSB851-2	Readings in Life Science 1
LSB852-2	Project
NOTE:	Students wishing to apply for entry into BAppSc(Hons) should consult with the contact person for the relevant science discipline before applying (see contact details link above).

Course structure - Major in Mathematics

Year 1, Semester 1

MAN787-1	Project
	36 credit points of elective units selected from the list below*

Year 1, Semester 2

MAN787-2	Project
MAN787-3	Project
	24 credit points of elective units selected from the list below*

Elective List (Mathematics) - 60 credit points to be selected

MAN717	Minor Project
MAN761	Analysis
MAN764	Applied Mathematical Modelling
MAN765	Bayesian Data Analysis
MAN766	Applied Time Series Analysis
MAN768	Advanced Techniques in Operations Research
MAN769	Mathematics of Finance
MAN771	Computational Mathematics 4
MAN774	Perturbation Methods
MAN775	Statistical Modelling of Financial Processes
MAN777	Mathematics of Fluid Flow
MAN778	Applications of Discrete Mathematics
	null
	Up to 12 credit points from the following lists can be included in the 60 credit points of electives:
MAB522	Computational Mathematics 3
MAB524	Statistical Inference
MAB613	Partial Differential Equations
MAB672	Advanced Mathematical Modelling
MAN536	Time Series Analysis
	null
	Up to two units of a quantitative nature from another Faculty or School may be included with the permission of the Mathematics Coordinator. The unit(s) must be of honours level and relevant to the proposed program. Examples of suitable units are:
EFN505	Financial Risk Management
PCB706	Quantum Mechanics
*	The Course Coordinator may approve a student taking 24 credit points of elective units (together with MAN787-1 and MAN787-2) in Semester 1 and 36 credit points of elective units (together with MAN787-3) in Semester 2.
NOTE:	Students wishing to apply for entry to BAppSc(Hons) should consult with the contact person for the relevant science discipline before applying (see contact details link above).

Course structure - Major in Physics

Year 1, Semester 1

PCB700-1	Research Project
PCB700-2	Research Project
PCB706	Quantum Mechanics
	Elective
NOTE:	An alternative to PCB706 Quantum Mechanics may be permitted

Year 1, Semester 2

PCB700-3	Research Project
PCB700-4	Research Project
PCB700-5	Research Project
	Elective
NOTE:	Students wishing to apply for entry into BAppSc(Hons) should consult with the contact person for the relevant science discipline before applying (see contact details link above).

Elective List (Physics)

PCB664	Lasers and Photonics
PCB669	Astrophysics 2
PCB708	Advanced Topics in Physics
PCN716	Advanced Topics in Physics 2
NOTE:	PCB708 and PCN716 typically comprise two components chosen from atmospheric aerosol physics, classical mechanics, non-linear optics, quantum electrodynamics, advanced general relativity or aspects of units from the Masters in Medical Physics course.

Potential Careers:

Actuary, Analytical Chemist, Astrophysicist, Biochemist, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Database Manager, Ecologist, Environmental Scientist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, Industrial Chemist, Laboratory Technician (Chemistry), Marine Scientist, Mathematician, Medical Biotechnologist, Medical Physicist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Physicist, Plant Biotechnologist, Population Ecologist, Programmer, Quantitative Analyst, Statistician, Virologist.

Graduate Diploma in Applied Science (SC71)

Year offered: 2009
Admissions: Yes
CRICOS code: 020314E
Course duration (full-time): 2 semesters (1 year)
Course duration (part-time): 4 semesters (2 years)
Domestic fees (indicative): 2009: CSP $3,696 (indicative) per semester
International Fees (per semester): 2009: $10,750 (indicative) per semester *(subject to annual review)*
Domestic Entry: February and July
International Entry: February
Total credit points: 96
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Associate Professor Peter Mather
Discipline coordinator: Dr Geoffrey Will (Chemistry); Dr Mark O'Brien (Life Science); Dr Troy Farrell (Mathematics); Associate Professor Peter Mather (Natural Resource Sciences); Dr Andrew Fielding (Physics)
Campus: Gardens Point

Entry requirements

Applicants must possess a bachelor degree in applied science or equivalent qualification, or other evidence of qualifications that satisfy the Faculty Academic Board that the applicant possesses the capacity to pursue the course of study.

Course Design

This coursework program allows students to complete a minor project in some disciplines. The assessed coursework may include advanced lecture courses, seminars, reading courses or independent study designed to focus on information retrieval skills. Coursework units are chosen from those in the Master of Applied Science course, and may contain units from other postgraduate courses, the Bachelor of Applied Science (Honours) program or advanced undergraduate programs.

Candidates of the Graduate Diploma in Applied Science undertake a program of coursework, or coursework and a minor research project, as approved by the Academic Board on the advice of the Head of School.

Students must complete a total of 96 credit points which may consist of between 60 and 96 credit points of coursework, and up to 36 credit points as a minor research project.

Coursework units will be selected from the specific units available within the Master of Applied Science (SC80) course and may contain units selected from other postgraduate courses or advanced undergraduate courses where the background of the student requires this.

Overview

This course offers students a one-year postgraduate qualification by coursework, or coursework and a minor research project. The course will particularly suit if students are employed in the industry and wish to undertake postgraduate study to upgrade their professional qualification in one of the science disciplines.

Contact Details

Coordinator
Associate Professor Peter Mather
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Email: p.mather@qut.edu.au

Discipline Coordinators

Chemistry
Dr Geoffrey Will
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Email: g.will@qut.edu.au

Life Science
Dr Mark O'Brien
Phone: +61 7 3138 2568
Email: m.obrien@qut.edu.au

Mathematics
Dr Troy Farrell
Phone: +61 7 3138 2364
Email: t.farrell@qut.edu.au

Natural Resource Sciences
Associate Professor Peter Mather
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Email: p.mather@qut.edu.au

Physics
Dr Andrew Fielding
Phone: +61 7 3138 5325
Email: a.fielding@qut.edu.au

Course structure - Chemistry Strand

PCN701	Topics in Advanced Chemistry 1
PCN705-1	Research Methodology
PCN705-2	Research Methodology
PCN710	Chemical Instrumentation
PCN720	Chemometrics
PCN730	Advanced Physical Methods in Chemistry
PCN740	Laboratory Techniques for Preparative Chemistry
PCN801	Topics in Advanced Chemistry 2

Course structure - Ecology, Environmental Science & Geoscience Strands

NRN100	Readings in Natural Resource Sciences 1
NRN101	Readings in Natural Resource Sciences 2
NRN104	Advanced Topics in Natural Resource Sciences 1
NRN105	Advanced Topics in Natural Resource Sciences 2

And units approved by the Strand Coordinator

Course structure - Life Science Strand

LSN011   Research Seminars in Life Science 1

LSN013   Readings in Life Science 3

LSN023   Research Seminars in Life Science 3

Course structure - Mathematics Strand

Units selected from other programs, such as MA75 Graduate Diploma in Mathematical Science and MA85 Master of Mathematical Science, offered by the School of Mathematical Sciences and approved by the Mathematics coordinator.

Course structure - Physics Strand

PCN715   Advanced Topics in Physics 1

PCN716   Advanced Topics in Physics 2

And/or alternative unit(s) approved by the Physics Coordinator

Potential Careers:

Actuary, Analytical Chemist, Astrophysicist, Biochemist, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Database Manager, Ecologist, Environmental Scientist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, Industrial Chemist, Laboratory Technician (Chemistry), Marine Scientist, Mathematician, Medical Biotechnologist, Medical Physicist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Physicist, Plant Biotechnologist, Population Ecologist, Programmer, Quantitative Analyst, Statistician, Virologist.

Master of Applied Science (Research) (SC80)

Year offered: 2009
Admissions: Yes
CRICOS code: 007897G
Course duration (full-time): 3 semesters (1.5 years)
Course duration (part-time): 6 semesters (3 years)
Domestic fees (indicative): Aust citizens or PRs will be awarded an RTS/RTA place or a QUT sponsorship for tuition fees. If you exceed the max time, you will be charged - 2009: $6,720 per semester (indicative)
International Fees (per semester): 2009: $11,250 (indicative) per semester *(subject to annual review)*
Domestic Entry: At any time
International Entry: At any time
Total credit points: 144
Standard credit points per full-time semester: 48
Standard credit points per part-time semester: 24
Course coordinator: Associate Professor Peter Mather
Discipline coordinator: Dr Geoffrey Will (Chemistry); Associate Professor Terry Walsh (Life Sciences); Professor Vo Anh (Mathematics); Associate Professor Peter Mather (Natural Resource Sciences); Dr Andrew Fielding (Physics)
Campus: Gardens Point

Entry Requirement

Applicants must possess a bachelor of applied science or equivalent qualification or other evidence of qualifications that satisfy the Faculty Academic Board that the applicant possesses the capacity to pursue the course of study.

Course Design

This degree consists of coursework that can comprise up to one-third of the course and research, which must be at least two-thirds of the course. The assessed coursework may be in the form of advanced lectures, seminars, reading courses, or independent study designed to focus on information retrieval skills. The research component is a program of supervised research and investigation at a level of scientific competence significantly higher than that expected from an undergraduate degree and, typically, a masters thesis does not need to be as substantial as a Doctor of Philosophy thesis.

Students undertake a program of research and investigation on a topic approved by the Academic Board. All projects should be sponsored either by outside agencies such as industry, government authorities, or professional organisations, or by the University itself.

Students entering the course with an honours degree or its equivalent to candidates with substantial relevant work experience normally gain exemptions to a maximum of 96 credit points at the discretion of the Academic Board on the recommendation of the Head of School.

Students entering the course with a graduate diploma may gain exemption to a maximum of 96 credit points at the discretion of the Academic Board on the recommendation of the Head of School.

A full-time candidate who does not hold an honours degree appropriate to the course of study will normally be required to complete both course and research work, including submission of the thesis for examination during a period of registration of 24 months. The corresponding period in the case of a part-time candidate shall be 48 months. In special cases the Academic Board may approve a shorter period.

A holder of an honours degree or its equivalent appropriate to the course of study may submit the thesis for examination after not less than 12 months of registration if a full-time student, or 24 months if a part-time student. In special cases the Academic Board may approve a shorter period.

Overview

The objectives of this course are to:

- provide postgraduate educational opportunities in specialised fields of applied science by means of a program that involves either an original contribution to knowledge or an original application of existing knowledge

- provide education in research methods

- enable graduates employed in industry to undertake further education by a combination of coursework, research and thesis

- expand the involvement of students employed in industrial organisations and external agencies in undertaking relatively short-duration applied research or investigation.

   Students can undertake an approved project in any area of interest supported by a research area or school within the Faculty of Science. Please note that these areas of research specialisation are only a guide. Staff are happy to discuss study choices directly with students.

Contact Details

Course Coordinator
Associate Professor Peter Mather
Phone: +61 7 3138 1737
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Discipline Coordinators

Chemistry
Dr Geoffrey Will
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Life Sciences
Associate Professor Terry Walsh
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Mathematics

Professor Vo Anh
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Natural Resource Sciences
Associate Professor Peter Mather
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Email: p.mather@qut.edu.au

Physics
Dr Andrew Fielding
Phone: +61 7 3138 5325
Email: a.fielding@qut.edu.au

Course structure - Chemistry Strand

PCN701	Topics in Advanced Chemistry 1	
PCN705-1	Research Methodology	
PCN705-2	Research Methodology	
	Select one of the following Elective Units:	
PCN710	Chemical Instrumentation	
PCN720	Chemometrics	
PCN730	Advanced Physical Methods in Chemistry	
PCN740	Laboratory Techniques for Preparative Chemistry	
PCN801	Topics in Advanced Chemistry 2	

Course structure - Ecology, Environmental Science & Geoscience Strands

	Essential units:	
NRN100	Readings in Natural Resource Sciences 1	
NRN102	Confirmation of Candidature Seminar	
NRN103	Final Seminar	
	Select up to one of the following units if required:	
NRN101	Readings in Natural Resource Sciences 2	
NRN104	Advanced Topics in Natural Resource Sciences 1	
NRN105	Advanced Topics in Natural Resource Sciences 2	

Course structure - Life Science Strand

LSN011	Research Seminars in Life Science 1
LSN013	Readings in Life Science 3
LSN023	Research Seminars in Life Science 3

Course structure - Mathematics Strand

Selections from other School programs, such as MA75 Graduate Diploma in Mathematical Science and MA85 Master of Mathematical Science, to a maximum of 60 credit points

Course structure - Physics Strand

PCN715	Advanced Topics in Physics 1
PCN716	Advanced Topics in Physics 2
	and/or alternative unit(s) approved by the Physics coordinator

Research Work

The Research Work component of the degree must constitute at least 128 credit points. The units below have been devised to represent the EFTSU (Effective Full-time Student Unit) and attendance type of graduate research students.

Full-Time Students

The minimum number of credit points per semester for full-time status is 36. The standard number is 48. At the end of each semester a grade of T - Assessment Continues will be awarded in any IFNXXX units provided satisfactory progress is being maintained. A final grade (S - Satisfactory or U - Unsatisfactory) will be awarded once the thesis has been examined according to the degree rules.

Full-Time Course Structure

Full-time students undertaking research but no coursework units enrol in

IFN100	Full-Time Masters Research

null

Full-time students who are required to undertake coursework units in addition to their research as part of their masters enrolment should enrol in a combination of the following units. These should total (in combination with the coursework unit/s) as close as possible to 48 credit points per semester.

IFN300	Masters Research
IFN301	Masters Research
IFN302	Masters Research
IFN303	Masters Research
IFN304	Masters Research

Part-Time Students

The maximum number of credit points per semester for part-time status is 36. The standard number is 24. At the end of each semester a grade of T - Assessment Continues will be awarded in any IFNXXX units provided satisfactory progress is being maintained. A final grade (S - Satisfactory or U - Unsatisfactory) will be awarded once the thesis has been examined according to degree rules.

Part-time Course Structure

Part-time students undertaking research but no coursework units enrol in:

IFN200	Part-Time Masters Research

null

Part-time students who are required to undertake coursework units in addition to their research as part of their masters enrolment

should enrol in a combination of the following units. These should total (in combination with the coursework unit/s) as close as possible to 24 credit points:

IFN302	Masters Research
IFN303	Masters Research
IFN304	Masters Research

Potential Careers:

Actuary, Analytical Chemist, Astrophysicist, Biochemist, Biologist, Biotechnologist, Chemist, Chemist Industrial, Coastal Scientist, Conservation Biologist, Database Manager, Ecologist, Environmental Scientist, Forensic Scientist, Geologist, Geophysicist, Geoscientist, Health Physicist, Hydrogeologist, Immunologist, Industrial Chemist, Laboratory Technician (Chemistry), Marine Scientist, Mathematician, Medical Biotechnologist, Medical Physicist, Microbiologist, Molecular Biologist, Natural Resource Scientist, Physicist, Plant Biotechnologist, Population Ecologist, Programmer, Quantitative Analyst, Statistician, Virologist.