

**While guidebooks may be a traveller's best friend when exploring new and unusual places, sometimes they fall short in providing up-to-date information.**

But UQ PhD graduate Jeff Axup from the US is hoping his research could change that by employing the latest developments in mobile communication.

Jeff, who graduated in 2007, is researching the potential of "mobile information sharing", a concept that goes beyond the traditional guidebook and introduces the concept of everyday people electronically sharing their experiences with other travellers while they are on the road.

"We are looking at ways for communities, or in this case backpackers, to communicate in a timely and immediate way," Jeff said.

"Imagine if, as a traveller, you were able to get first hand information from other travellers who had just been to where you want to go.

"But instead of hoping to find the right person by chance, you could be notified when you are near them, or be able to rapidly search travel diaries of relevant people."

He said this concept of a "social pairing system" could eventually be used by other types of mobile groups or communities such as business travellers, delivery workers or taxi drivers.

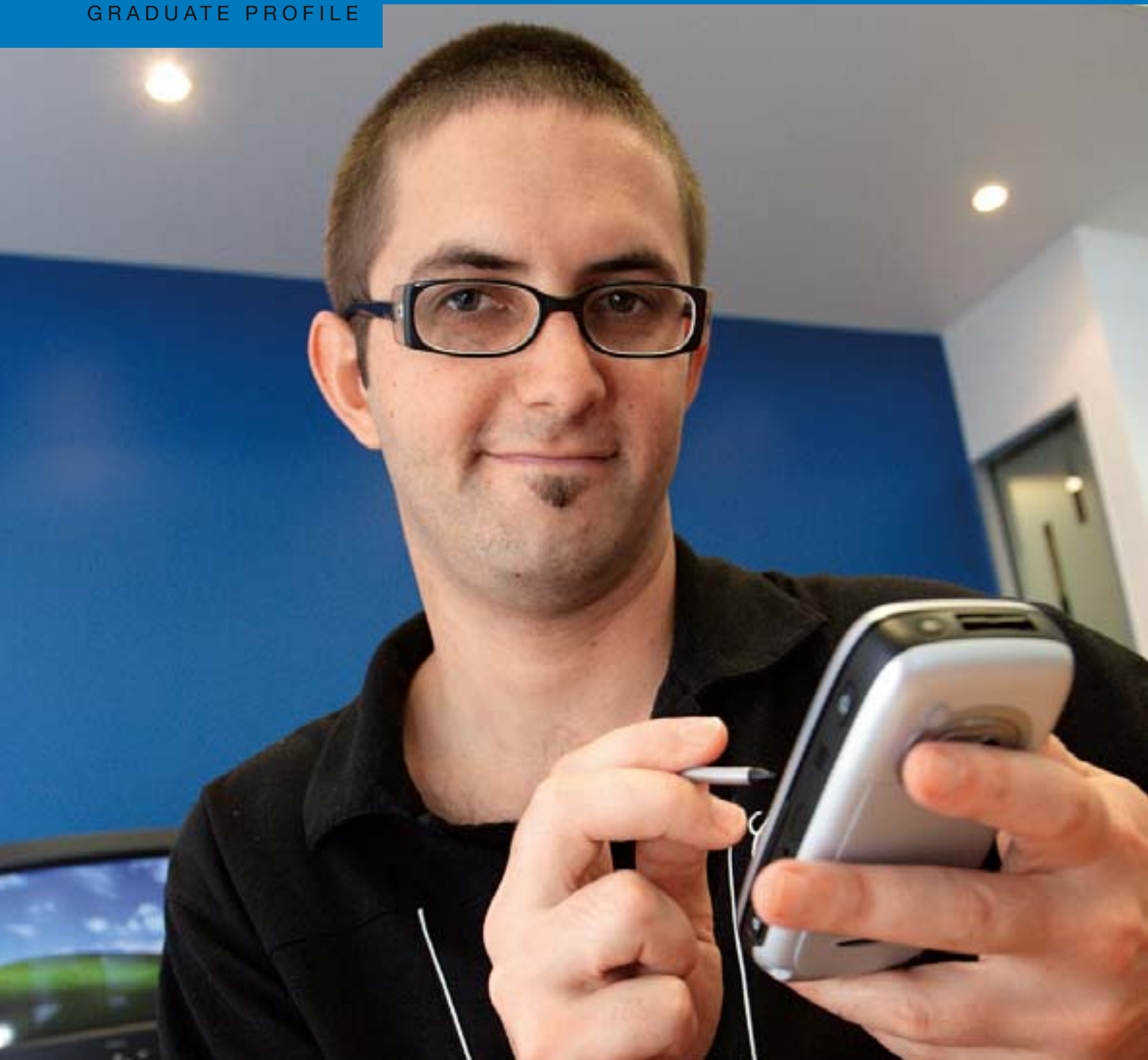
"I'm looking at ways for people who have a common interest, but have never met before, to be able to easily communicate and share common experiences," he said.

"Already that is happening in some degree with SMS, instant messaging and Internet forums, but I am looking at small and local interactions that are very immediate and potentially helpful.

"This may involve things like geo-tagging, where people leave behind "electronic graffiti" for fellow travellers or other location-based services."

Jeff said his research would ultimately lead to software applications that could be used on existing and future mobile phones.

## GRADUATE PROFILE



# SCIENCE & INFORMATION TECHNOLOGY

## Programs in this discipline

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## Why choose UQ for studies in Science & Information Technology?

Students not only study Science and IT at UQ, they experience it. In addition to lectures and tutorials, students participate in field trips, industry placements and research projects utilising the latest state-of-the-art facilities.

UQ Science and Information Technology degrees allow students to combine a number of interest areas. Together with dual program choices, this maximises employment opportunities.

With strengths in all areas of the biological and chemical sciences and information technology, our programs are interdisciplinary in nature and at the forefront of emerging disciplines. They provide a challenging and rewarding environment for our students while maximising employment opportunities.

UQ has one of the most comprehensive ranges of science specialisations in Australia, offering students more choices in science courses than other institutions.

Our programs are informed by research, with world-class scientists incorporating their latest discoveries into their teaching, which means you are learning as they are discovering. Hands-on experience and opportunities for field and laboratory work means you are putting your acquired knowledge to practical use.

UQ is also a hub for major science initiatives in the Asia-Pacific region for the biosciences, neuroscience, nanotechnology and biotechnology. Our location also provides unique opportunities to study environmental disciplines in a subtropical environment, with

ready access to arid, temperate, tropical and marine systems including World Heritage rainforests, the Great Barrier Reef and outback Australia.

UQ's facilities and special features include:

- > a reputation as Australia's top biological sciences research university
- > Australia's most extensive marine science teaching and research facilities, with field stations on the Great Barrier Reef (Heron Island, Low Isles) and Moreton Bay (North Stradbroke Island)
- > commercial aquaculture facilities
- > Australia's most comprehensive range of electron optical instrumentation, within UQ's Centre for Microscopy and Microanalysis
- > innovative and integrated research facilities, including the Institute for Molecular Bioscience (IMB), the Australian Institute for Bioengineering and Nanotechnology (AIBN), and the Queensland Brain Institute (QBI)
- > an award-winning IT research centre, the Distributed Systems Technology Centre (DSTC), with industry participants such as Boeing, Microsoft, IMB and Sun Microsystems
- > specialist laboratories for studying robotics, electronics, computer systems, communications, power systems, optics, signal-processing and microwaves
- > six fully-equipped multimedia studios and two dedicated Mac Video/Animation workshops with high-end dual CPU G4 machines and dual-head monitors, and
- > 24-hour student access to IT facilities.

## Career opportunities in this discipline

Characterised by rapid advancements and new discoveries, careers in Science and Information Technology are exciting and fulfilling. UQ graduates in these disciplines are in high demand by a broad range of private and public sector employers, in areas including:

- |                                    |                                 |
|------------------------------------|---------------------------------|
| > aquaculture                      | > media and publishing          |
| > architecture                     | > mining and manufacturing      |
| > banking                          | > multimedia/Web design         |
| > biotechnology                    | > museums                       |
| > chemical industries              | > national parks                |
| > commerce                         | > natural resources             |
| > commercialisation                | > patent law                    |
| > computer programming             | > pathology                     |
| > conservation                     | > pharmaceuticals               |
| > diagnostics                      | > planning and consulting       |
| > economics                        | > quarantine                    |
| > ecotourism                       | > software consulting           |
| > education and research           | > sports industry               |
| > engineering                      | > surveying systems development |
| > environmental consulting         | > systems support               |
| > fisheries                        | > teaching                      |
| > food and agriculture             | > sales and marketing           |
| > forensic science                 | > textiles                      |
| > healthcare and insurance         | > usability consulting          |
| > intellectual property management | > video games modelling         |
| > interaction design               |                                 |
| > law enforcement                  |                                 |

**Eligibility for visa**

Unless otherwise specified, international students must undertake programs on campus at UQ on a full-time basis to be eligible to apply for an Australian student visa. See page 115 for more information.

## GRADUATE CERTIFICATE IN GRADUATE DIPLOMA IN MASTER OF MASTER (ADVANCED) OF Biotechnology

**Location** St Lucia

**Commencement semester** 1, 2

**Application closing date** Refer to page 116

**Students may also undertake a research higher degree in this discipline.**

*Additional program information is provided in the tables on pages 105–110*

*For English language proficiency requirements, please refer to pages 113–114*

**Graduate Certificate**

**Duration** 1 semester full-time

**Admission requirements** Bachelor of Biotechnology or Bachelor of Science in a biotechnology related field or equivalent degree

**Graduate Diploma**

**Duration** 2 semesters full-time

**Admission requirements** Bachelor of Biotechnology or Bachelor of Science in a biotechnology related field or equivalent degree OR Graduate Certificate in Biotechnology

**Coursework Master**

**Duration** 3 semesters full-time. Students entering the #16 Master can complete the program in 2 semesters

**Admission requirements** #24 Master (3 semesters): an honours degree in science/biotechnology/related area OR Graduate Certificate in Biotechnology OR Graduate Diploma in Biotechnology OR bachelor degree in a related discipline with at least 2 years approved work experience or research publications. #16 Master (2 semesters): 4-year Bachelor of Biotechnology (Honours) or Bachelor of Science (Honours) with Class I or IIA in a field of biotechnology directly relevant to the proposed program of study

**Coursework Master (Advanced)**

**Duration** 4 semesters full-time. A 3-semester program is available to students who have a 4-year relevant degree and wish to pursue advanced study

**Admission requirements** #32 program (4 semesters): an honours degree in science/biotechnology/relevant area OR a Graduate Certificate in Biotechnology OR Graduate Diploma in Biotechnology, OR bachelor degree in related discipline with at least 2 years approved work experience or research

publications; and standard UQ English requirements #24 program (3 semesters): 4-year Bachelor of Biotechnology (Honours) OR 4-year Bachelor of Science (Honours) with Class I or IIA in a field of biotechnology directly relevant to the proposed program of study in the Masters degree, OR an approved degree-equivalent of at least 4 years duration

**Program outline**

There is currently a tremendous growth in the international biotechnology industry and allied service sector. Research and development managers require scientists with core technical skills, knowledge of commercial imperatives and current regulatory environments.

This program is designed for scientists who want to update their technical skills in core areas such as molecular biology, protein technology or bioinformatics, or who wish to acquire research laboratory experience. The programs also suit legal or business professionals with some scientific background who want to learn about the latest technological developments.

This program provides comprehensive training in scientific disciplines underpinning the biotechnology industry and research through advanced lectures, projects and directed study. Students gain an introduction to research methodology; training in the special requirements for undertaking research in the biotechnology industry; and the opportunity to undertake a major biotechnology research project.

Graduates possess an understanding of a broad range of modern biotechnologies; the commercialisation of products and marketing; the business environment, including business planning and project management; and how research and development are undertaken in industry settings.

**Supplementary information**

The biotechnology programs emphasise the development of skills, knowledge and understanding relevant to biotechnology research and the biotechnology industry and provide: knowledge of a broad range of modern biotechnologies; an appreciation of the business environment, including business planning and project management; and an understanding of commercialisation of products and marketing.

**Career opportunities**

Positions in biotechnology companies and in government institutions in biotechnology research, product design and development, commercialisation and management.

**Contact details**

**International Recruitment Manager**

www.uq.edu.au/international/enquiry

Phone (outside Australia) + 61 3 8676 7004

(within Australia – free call) 1800 671 980

## GRADUATE CERTIFICATE IN GRADUATE DIPLOMA IN MASTER OF Entomology

**Location** St Lucia

**Commencement semester** 1, 2

**Application closing date** Refer to page 116

**Students may also undertake a research higher degree in this discipline.**

*Additional program information is provided in the tables on pages 105–110*

*For English language proficiency requirements, please refer to pages 113–114*

**Graduate Certificate**

**Duration** 1 semester full-time

**Mode** Only available externally

**Admission requirements** Bachelor of Science or approved equivalent

**Graduate Diploma**

**Duration** 2 semesters full-time

**Mode** Only available externally

**Admission requirements** Bachelor of Science or approved equivalent OR Graduate Certificate in Entomology

**Coursework Master**

**Duration** 3 semesters full-time. Students entering the #16 MSc can complete the program in 2 semesters full-time

**Mode** Only available externally

**Admission requirements** #16 Masters (2 semesters): Bachelor of Science (Honours) or equivalent. #24 Masters (3 semesters): Bachelor of Science or equivalent OR Graduate Certificate in Entomology OR Graduate Diploma in Entomology

**Program outline**

Postgraduate studies in entomology provide advanced entomological training through lectures, practical work, projects and directed study to meet a variety of career and educational needs. It also allows students to shift careers into entomology, or upgrade skills for professional training and development. Students develop technical and problem solving skills and are introduced to research methodology. The program has access to one of Australia's largest insect and mite collections, as well as modern facilities supporting digital imaging, computer interactive diagnostics, molecular techniques, modelling, and the study of insect mating, host seeking behaviour and field ecology.

**Career opportunities**

Most graduates will work with insects and arachnids important in human affairs and be employed by institutions such as the Commonwealth Scientific and Industrial Research Organisation (CSIRO), Queensland State Departments of Agriculture, Health, Environment, Conservation and Land Management, and Quarantine. Urban pest control companies, manufacturers of agricultural and veterinary insecticides and biological control companies also employ entomologists.

Graduates find employment in schools, universities and museums as teachers, researchers and technicians, in larger urban pest control companies in advisory and training positions, as advisers in pest control in agricultural and veterinary settings and with environmental impact studies using insects as bio-indicators.

### Contact details

#### International Recruitment Manager

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## GRADUATE CERTIFICATE IN GRADUATE DIPLOMA IN MASTER OF Food Studies

**Location** St Lucia

**Commencement semester** 1, 2

**Application closing date** Refer to page 116

**Students may also undertake a research higher degree in this discipline.**

*Additional program information is provided in the tables on pages 105–110*

*For English language proficiency requirements, please refer to pages 113–114*

### Graduate Certificate

**Duration** 1 semester full-time

**Mode** Also available externally

**Admission requirements** A bachelor degree in food studies or a related field OR post-secondary study and 2 years work experience in a related field

### Graduate Diploma

**Duration** 2 semesters full-time

**Mode** Also available externally

**Admission requirements** A bachelor degree in food studies or a related field OR relevant post-secondary study and work experience OR the Graduate Certificate in Food Studies

### Coursework Master

**Duration** 3 semesters full-time. A two semester program is available to qualified applicants

**Mode** Also available externally

**Admission requirements** For the #24 Master (3 semesters): a bachelor degree in food studies or related field OR the Graduate Diploma in Food Studies. For the #16 Master (2 semesters): a four-year food studies degree or equivalent

### Program outline

The food studies program provides postgraduate opportunities to build on specific knowledge of the sciences and technologies related to commercial food-processing and/or human nutrition. Students select from a range of courses to meet individual needs and specialisation preferences, and also undertake a research project within the broad areas of food industry, food science, technology and engineering, or nutrition. Graduates of the program demonstrate specialised knowledge of selected fields of food-processing. They can integrate and apply knowledge from a range of sources to

technical issues; and effectively locate, interpret, critically evaluate, synthesise and communicate information in selected fields.

### Supplementary information

Some courses are also offered in external mode, allowing students to complete the programs in external mode. Courses offered in the external mode may have residential school requirements. It is an expectation that students will have private access to a computer and the Internet. An internal student attends lectures, tutorials and practicals on campus. An external student receives instruction by mail or via the Internet.

### Fields of study

Food Science and Technology (*Master only*)

Human Nutrition (*Master only*)

### Career opportunities

Graduates find employment as food technologists, food scientists, laboratory managers, food product development scientists, quality control managers, technical sales persons, food production managers, nutrition advisors or community health educators.

### Professional memberships

Graduates of food studies may be eligible for membership with the Australian Institute of Food Science and Technology.

### Contact details

#### International Recruitment Manager

www.uq.edu.au/international/enquiry  
Phone (outside Australia) + 61 3 8676 7004  
(within Australia – free call) 1800 671 980

## GRADUATE CERTIFICATE IN GRADUATE DIPLOMA IN MASTER OF Geographic Information Science

**Location** St Lucia

**Commencement semester** 1

**Application closing date** Refer to page 116

**Students may also undertake a research higher degree in this discipline.**

*Additional program information is provided in the tables on pages 105–110*

*For English language proficiency requirements, please refer to pages 113–114*

### Graduate Certificate

**Duration** 1 semester full-time

**Admission requirements** Bachelor degree.

Applications on the basis of post-secondary study and two years work experience in a related field will be individually assessed

### Graduate Diploma

**Duration** 2 semesters full-time

**Admission requirements** Bachelor degree OR Graduate Certificate in Geographic Information Science. Applications on the basis of post-secondary study and two years work experience in a related field will be individually assessed

### Coursework Master

**Duration** 3 semesters full-time

**Admission requirements** Bachelor degree OR Graduate Certificate/Diploma in Geographic Information Science

### Program outline

The postgraduate programs in Geographic Information Science produce high-quality graduates with both technical and research skills in advanced areas of geographic information science. Graduates are competent in: basic and advanced computing skills especially in Geographic Information Systems (GIS) software; various GIS and remote sensing operations; and implementation and management of GIS projects. The program also covers applications of GIS and remote sensing technologies to various areas; resource analysis through remote sensing and airphoto interpretation; expert systems and decision support systems; and research, both applied and theoretical, in the field of spatial information systems.

### Supplementary information

The majority of courses are offered late afternoon/early evening.

### Career opportunities

Graduates of this program are professionally qualified in the field of geographic information science and can apply the techniques of management and analysis of geographic information to a range of discipline areas, which can lead to careers in government, semi-government agencies, private industry and research institutions.

### Professional memberships

Graduates of this degree may be eligible for membership of the Spatial Sciences Institute.

### Additional cost

Some courses may incur additional costs (eg, field trips).

### Contact details

#### International Recruitment Manager

www.uq.edu.au/international/enquiry  
Phone (outside Australia) + 61 3 8676 7004  
(within Australia – free call) 1800 671 980

## GRADUATE CERTIFICATE IN GRADUATE DIPLOMA IN MASTER OF Information Technology

**Location** St Lucia

**Commencement semester** 1, 2

**Application closing date** Refer to page 116

**Students may also undertake a research higher degree in this discipline.**

*Additional program information is provided in the tables on pages 105–110*

*For English language proficiency requirements, please refer to pages 113–114*

### Graduate Certificate

**Duration** 1 semester full-time

**Admission requirements** Bachelor degree in a field other than information technology. Applications on the basis of post-secondary study and 2 years work experience in a related field will be individually assessed

#### Graduate Diploma

**Duration** 2 semesters full-time

**Admission requirements** Bachelor degree in a field other than information technology OR Graduate Certificate in Information Technology. Applications on the basis of post-secondary study and 2 years work experience in a related field will be individually assessed

#### Coursework Master

**Duration** 3 semesters full-time

**Admission requirements** Bachelor degree in a field other than information technology OR Graduate Diploma in Information Technology

#### Program outline

The Master of Information Technology has a strong focus on information systems and database technology. These systems are used to help run organisations of all kinds. About half of the information technology industry in Australia is in this area, and those people who intend to use the Master of Information Technology to leverage their previous skills will use information systems and database technology within their own industries.

The Master of Information Technology is an ideal choice for a student who does not have a previous IT degree and wishes to enhance their current discipline areas through specialist IT knowledge.

#### Career opportunities

Graduates of the Master of Information Technology will have completed an industrial-scale system from initial specification through design, implementation and documentation and will have skills in software engineering, information systems, discrete mathematics, basic operating systems, networking, relational databases, advanced databases, ontology and the semantic Web, Web information systems and service-oriented architectures.

Depending on their area of expertise, many of our graduates will have specialist knowledge in human-computer interaction, algorithms and data structures, networking, information security, artificial intelligence and artificial minds.

Master of Information Technology graduates are employed in areas as diverse as electronic commerce, information systems, technology management, computer science, health informatics, geographical information systems and biotechnology.

#### Professional memberships

Graduates of this degree may be eligible for membership with the Australian Computer Society.

#### Additional cost

There are no additional charges levied on this program, but students may need to purchase materials, computing equipment and printing.

#### Contact details

**International Recruitment Manager**

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## GRADUATE CERTIFICATE IN GRADUATE DIPLOMA IN MASTER OF Interaction Design

**Location** St Lucia

**Commencement semester** 1, 2

**Application closing date** Refer to page 116

**Students may also undertake a research higher degree in this discipline.**

*Additional program information is provided in the tables on pages 105–110*

*For English language proficiency requirements, please refer to pages 113–114*

#### Graduate Certificate

**Duration** 1 semester full-time

**Admission requirements** Bachelor degree in a field other than interaction design. Applications on the basis of post-secondary study and 2 years work experience in a related field will be individually assessed

#### Graduate Diploma

**Duration** 2 semesters full-time

**Admission requirements** Bachelor degree in a field other than interaction design OR Graduate Certificate in Interaction Design. Applications on the basis of post-secondary study and 2 years work experience in a related field will be individually assessed

#### Coursework Master

**Duration** 3 semesters full-time

**Admission requirements** Bachelor degree in a field other than interaction design or information environments OR Graduate Certificate/Diploma in Interaction Design

#### Program outline

In the past, computer work was a profession for specialists. Today, and even more so in the future, interaction with electronic devices is a major part of our daily lives. From early childhood onwards we are connected to networks, telecommunications and computer-based technology, therefore the focus of systems design and design in technology consequently is destined to change. These programs train students to understand and solve usability problems.

#### Career opportunities

Both in Australia and overseas, career opportunities for graduates are excellent, as demand in the interaction design area continues to grow. The Master of Interaction Design provides the opportunity for graduates to understand and solve usability problems as well as acquire the diverse skills which will enable graduates to work in cross-discipline areas and apply their skills to any specialist discipline area. Graduates will find employment in industry, business, government, defence, health, education, media and other areas.

#### Professional memberships

Graduates of this program may be eligible for membership with the Australian Computer Society.

#### Additional cost

There are no additional charges levied on this program but students may need to purchase materials, computing equipment and printing.

#### Contact details

**International Recruitment Manager**

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## GRADUATE CERTIFICATE IN GRADUATE DIPLOMA IN MASTER OF Molecular Biology

**Location** St Lucia

**Commencement semester** 1, 2

**Application closing date** Refer to page 116

**Students may also undertake a research higher degree in this discipline.**

*Additional program information is provided in the tables on pages 105–110*

*For English language proficiency requirements, please refer to pages 113–114*

#### Graduate Certificate

**Duration** 1 semester full-time

**Admission requirements** Bachelor of Science or approved equivalent

#### Graduate Diploma

**Duration** 2 semesters full-time

**Admission requirements** Bachelor of Science or equivalent or Graduate Certificate in Molecular Biology

#### Coursework Master

**Duration** 3 semesters full-time. Students entering the #16 Master can complete the program in 2 semesters full/part-time equivalent

**Admission requirements** #24 Master (3 semesters): Bachelor of Science (Honours) or approved equivalent OR Graduate Certificate in Molecular Biology OR Graduate Diploma in Molecular Biology OR bachelor degree in related discipline and at least 2 years approved work experience or research publications. #16 Master (2 semesters): Bachelor of Science with Class I or IIA Honours in molecular biology or equivalent

#### Program outline

Molecular biology is the study of the structure and function of genes and the proteins they encode, including genome sequencing, recombinant DNA technology and macromolecular structure determination. This program provides advanced theoretical and practical training in molecular biology through lectures, workshops, extended projects and directed study. Students gain training in research methodology in molecular biology and have the opportunity to undertake major individual research.

#### Career opportunities

Graduates have a wide range of opportunities available. These include employment in

pathology and hospital laboratories through to the food, biotechnology and pharmaceutical industries, as well as government departments and research laboratories, and the higher education sector.

### Contact details

#### International Recruitment Manager

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## GRADUATE CERTIFICATE IN GRADUATE DIPLOMA IN MASTER OF Science

**Location** St Lucia

**Commencement semester** 1, 2

**Application closing date** Refer to page 116

**Students may also undertake a research higher degree in this discipline.**

*Additional program information is provided in the tables on pages 105–110*

*For English language proficiency requirements, please refer to pages 113–114*

### Graduate Certificate

**Duration** 1 semester full-time

**Admission requirements** Bachelor of Science in a related field or equivalent degree

### Graduate Diploma

**Duration** 2 semesters full-time

**Admission requirements** Bachelor of Science in a related field or equivalent degree OR Graduate Certificate in Science

### Coursework Master

**Duration** 3 semesters full-time. Students entering the #16 MSc can complete the program in 2 semesters full/part time equivalent

**Admission requirements** #16 Master (2 semesters): 4-year bachelor degree. #24 Master (3 semesters): 3-year bachelor degree OR Graduate Diploma in Science OR Graduate Certificate in Science

### Program outline

This program provides advanced theoretical and practical knowledge in a range of specialised scientific fields, through lectures, workshops, projects and directed study. Students can extend their knowledge in their chosen field or develop an understanding of specialised fields in which they have little previous knowledge.

### Fields of study

#### Computer Science

The MSc(CompSc) suite of programs is designed for students with a background in information technology or related fields (computer science, computer engineering). The programs aim to further professional development of graduates, prepare them for the challenges of rapidly advancing IT technologies and to provide industry with highly-skilled IT professionals. They are ideal for upgrading

qualifications in a specific area and deepening knowledge and skills, and can help meet membership requirements for professional associations, such as the Australian Computer Society. The program offers a wide choice of courses which allow specialisation in a variety of areas including information systems, software engineering, computer systems (design and programming of Internet services, computer networks, distributed computing), multimedia and cognitive science.

### Conservation Biology

Conservation biology is an integrative discipline that focuses on the problems of restoring and maintaining viable populations of animal and plant species, and natural and managed ecosystems. The program aims to provide core theoretical and practical training in conservation biology. Graduates with little tertiary training in conservation biology can access within the program, courses that provide prerequisite knowledge. Flexible delivery courses are designed to suit those in remote locations and/or in full-time employment.

### Financial Mathematics

The program caters for students who need to study the advanced techniques used in financial mathematics and risk management. It aims to attract graduates with some background in undergraduate mathematics. Its flexible structure allows students to develop the required background in mathematics and finance, and to take research level courses and project work in financial mathematics and its applications.

### Human Movement Science (Graduate Certificate, Graduate Diploma only)

This field of study may be used by graduates who possess degrees not directly comparable to either a Bachelor of Science (in the field of Human Movement Science) or the Bachelor of Applied Science (Human Movement Studies) from The University of Queensland for the purpose of gaining a research grounding for entering either the MPhil or PhD program in human movement studies. Alternatively the GDipSc may be taken by students from other degrees seeking to gain advanced knowledge in one or more of the specialised scientific sub-disciplines of human movement studies (eg, exercise physiology/biochemistry, biomechanics, motor control, sport and exercise psychology).

### Mathematics

This program enables students to undertake advanced courses in mathematics and its applications. Special courses enable students to build the necessary background and techniques in pure or applied areas. Advanced level courses introduce students to recent developments in a broad range of modern mathematics, including analysis; algebra and combinatorics; applied mathematics; computational mathematics; and statistics and probability. Students cover modern applications of mathematics in areas such as coding and cryptology; bioinformatics; mathematical physics; mathematical ecology; computational

science and visualisation; nonlinear differential equations; and financial mathematics. Students develop mathematical research techniques through projects that provide the opportunity to work within any of the research centres associated with the mathematics department.

### Physics

Physics generates fundamental knowledge needed for future technological advances that will continue to drive the economic engines of the world. Physics plays a pivotal role in the education of and support for other disciplines, including agriculture, biology, chemistry, engineering and medicine. It also leads to careers in astrophysics and cosmology, geophysics, laser science and photonics, condensed matter physics and theoretical physics. The postgraduate coursework program in physics is designed for students who have a substantial background at undergraduate level and offers the opportunity to carry out research projects with nationally and internationally recognised staff in various research centres such as the Centre for Biophotonics and Laser Science, the Centres of Excellence for Quantum Computer Technology and Quantum-Atom Optics, the Centre for Hyperionics and the Centre for Mathematical Physics.

### Statistics

Statistics is the scientific application of mathematical principles to the collection, analysis and presentation of numerical data. Statisticians contribute to scientific inquiry by applying their mathematical knowledge to the design of surveys and experiments; collection, processing, and analysis of data; and interpretation of the results. Statistical methods can be applied to a variety of areas, including biology, economics, engineering, medicine, public health, psychology, marketing, education, and sports. Theoretical and practical courses offer students experience in the use of popular statistical and data analysis packages. The program covers all areas of modern statistics and equips graduates with the skills and knowledge necessary to embark on careers as professional statisticians. Major areas of study are applied and theoretical statistics and probability theory.

### Additional cost

Projects in some disciplines will involve field work and may incur additional costs to cover transport, accommodation and food.

### Contact details

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