# Bachelor of Information Technology (Faculty of Sciences) (BINT) - BIT

CRICOS code (International applicants): 007490J

This program is offered only to continuing students. No new admissions will be accepted. Students who are interested in this study area should consider the new Bachelor of Information Technology.

	On-campus	Distance education
Campus:	Toowoomba	Toowoomba
Fees:	Commonwealth supported place Domestic full fee paying place International full fee paying place	Commonwealth supported place Domestic full fee paying place International full fee paying place
Standard duration:	3 years full-time, 6 years part-time	

#### Contact us

Current students

Ask a question

Freecall (within Australia): 1800 007 252

Phone (from outside Australia): +61 7 4631 2285

Email: usq.support@usq.edu.au

## Applied computer science major study

This major develops students' skills and knowledge in software development, programming languages, networking and the design and implementation of computer and information systems.

#### Career opportunities

Computer Programmer, Computer Analyst, Project Leader, Web Designer, Business Analyst, IT Manager, Computer Network Specialist, Database Administrator, Database Designer.

## Networking and Security major study

The Networking major aims to equip students with the skills required to manage networks of computers, of the sort that exist today in nearly all organisations. Graduates will be able to design, install, configure and maintain such networks and the systems that operate on them.

#### Career opportunities

Network Administrator, Network Designer, Network Security Specialist.

#### Professional accreditation

This program is accredited at professional level by the Australian Computer Society and, through the Seoul Accord, is recognised in other countries.

#### **Program aims**

The Bachelor of Information Technology is a vocationally oriented program emphasising the resolution of technological problems leading to the effective management and analysis of information in both the private and public sectors. Graduates should be familiar with relevant major academic disciplines and possess knowledge and skills in problem resolution and communication, as well as specific attributes enabling them to work effectively in their chosen area(s) or specialisation(s).

Achievement of the objectives of the student's area of specialisation will result in a graduate of high academic standard who is capable of competing for employment in a chosen professional area and pursuing career development in that or other related areas.

### **Program objectives**

Graduates of this program will be able to:

- work as a professional in the Information Technology industry
- demonstrate sound presentation and communication skills which are required in the computing industry
- acquire specific knowledge and skills relevant to their disciplines and careers
- develop appropriate intellectual, professional and personal attributes
- become good problem-solvers and innovative thinkers, who are able to learn new skills independently and efficiently and consequently to succeed in a competitive professional environment
- demonstrate a basic understanding of the principles of information technology
- identify information needs appropriate to their area of specialisation and apply the techniques required to gather and interpret such information
- demonstrate skills in the analysis and determination of technological issues at management level
- identify, analyse and solve problems in one or more areas of information technology by selecting and using either quantitative or qualitative techniques appropriate to the resolution of technical problems
- satisfy academic admission requirements for membership of relevant professional bodies
- understand the ethics of their profession and the need for a commitment to that profession
- proceed to higher studies
- be capable of working with people from other disciplines towards the solution of common problems.

#### **Admission requirements**

For entry into the Bachelor of Information Technology program, applicants will require Queensland Senior School Certificate (Year 12) or equivalent with the following:

- English (four semesters Sound Achievement) or equivalent. International applicants must have met the University's English language requirements or have completed the University's ELICOS/EAP.
- Mathematics A (four semesters Sound Achievement) or equivalent

#### International full fee paying place

International students pay full fees. Full fees vary depending on the courses that are taken and whether they are studied on-campus, via distance education/online. You are able to calculate the fees for a particular course via the Course Fee Finder.

#### **Program structure**

Students shall complete the Common Core (eight units) together with one of the BIT majors described in the accompanying tables (this will be known as the first major). Each major contains eight courses. The majors available are:

- Applied Computer Science
- Networking and Security

The remaining eight units shall be completed in one of three ways as listed below. The first two minors will result in the award of a BIT degree with a double major.

- (1) Complete an eight-unit second major chosen from one of the following:
  - the Creative Multimedia major from the Faculty of Arts
  - any eight-unit major identified in the BSc rules
  - subject to approval from the Program Coordinator, an eight-unit major identified as part of a USQ degree program that is not listed above.
- (2) Complete a second BIT major from this program together with up to four electives chosen, subject to pre-requisite requirements, from any Faculty of the University. Depending on the choice of majors, which governs the amount of common courses, between one and four elective courses may be undertaken.
- (3) Complete a minimum of four IT electives together with a maximum of four non-IT electives. An IT elective is defined as any CSC course code that is not included in the major. Non-IT electives may be chosen, subject to pre-requisite requirements, from any Faculty of the University.

#### **Unsuitable electives**

For various reasons, the following courses will not be approved as electives: CIS1000, CIS1001, CSC1402, CIS2002, MGT2100, MGT2102.

In addition, only one of the courses STA3300 Experimental Design and STA3302 Statistics for Researchers may be credited towards a Bachelor of Information Technology program unless approved by the Program Coordinator.

#### Required time limits

Core courses

Students have a maximum of 9 years to complete this program.

_		

#### **Footnotes**

- \* Students who have gained an Exit Level of Very High Achievement (VHA) in Mathematics B in Queensland Grade 12 or its equivalent OR an Exit Level of High Achievement (HA) in Mathematics B AND High Achievement (HA) in Mathematics C in Queensland Grade 12 or its equivalent, may be given the opportunity to replace MAT1100 Foundation Mathematics with an additional elective as approved by the Program Coordinator.
- # Students in the Games and Creative Technologies major should replace this course with MAT1102 Algebra and Calculus I

## Games and Creative Technologies, Multimedia Technology, Software Engineering, and Web Information Systems

The following majors in the Bachelor of Information Technology (BINT): Games and Creative Technologies, Multimedia Technology, Software Engineering, and

CSC3400 Database Systems	1	ONC, EXT	All
CSC3403 Comparative Programming	1	ONC, EXT	All
Languages			
CSC3419 XML and the Web	2	ONC, EXT	All
CSC3407 Network Fundamentals and	1	ONC, EXT	All
Routing			

## **Networking and Security major study**

On completion of the Networking major, graduates should:

- be able to design, install, configure, and maintain networks and their operating systems
- have acquired skills in development of new systems to operate networks
- be able to interface networks with wide area networks such as the Internet and newer network architectures
- have a sound understanding of the operating systems that are used to provide services on networks, including at least Unix and Windows NT.

## **Major Aims**

The Netw4 Tm(Netw)Te 9he Netw

## **Residential schools**