

Master of Information Technology (Professional) (Faculty of Sciences) (MPIT) - MIT(Prof)

CRICOS code (International applicants): 030315K

No new admissions will be accepted into the MPIT program after Semester 1, 2010. From Semester 2, 2010 students who are interested in this study area should consider the [Master of Computing Technology](#), [Master of Computing Technology \(Extended\) \(MCOTorMCTE\)](#).

	On-campus	Distance education
Semester intake:	Semester 1 (March)	Semester 1 (March)
Campus:	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:	1.5 years full-time, 4 years part-time (This program may be fast-tracked in 3 semesters by undertaking 4 courses per semester)	
Program articulation:	From: Graduate Diploma of Information Technology (Faculty of Sciences)	

Notes:

This program may be fast-tracked in three semesters by undertaking four courses per semester.

Contact us

Future Australian and New Zealand students	Future International students	Current students
Ask a question Freecall (within Australia): 1800 640 678 Phone (from outside Australia): +61 7 4631 5315 Email: studysci@usq.edu.au	Ask a question Phone: +61 7 4631 5543 Email: international@usq.edu.au	Ask a question Freecall (within Australia): 1800 007 252 Phone (from outside Australia): +61 7 4631 2285 Email: usqassist@usq.edu.au

Program focus

The Master of Information Technology (Professional) is a vocationally and academically-oriented program. The Faculty of Sciences offers a program with strands in Networking and System Security, Software Engineering and Web Technology, which provides for graduates (in any field whether computing related or not) to gain skills and knowledge in key areas of computing which relate to their needs and the needs of their profession or industry. It aims to produce graduates who can work as web information professionals, system or network administrators, or software engineers.

Professional accreditation

This program is accredited by the [Australian Computer Society](#).

Program aims

The Master of Information Technology (Professional) is a vocationally and academically-oriented program. The Faculty of Sciences offers a program with strands in Networking and System Security, Software Engineering and Web Technology, which provides for graduates (in any field whether computing related or not) to gain skills and knowledge in key areas of computing which relate to their needs and the needs of their profession

or industry. It aims to produce graduates who can work as web information professionals, system or network administrators, or software engineers.

Program objectives

Successful completion of the program will enable graduates to:

- work as a professional in the Information Technology industry
- acquire specific knowledge and skills in information technology in one or several of the following areas: web information systems, software engineering, networking, or network commerce
- acquire specific knowledge and skills in information technology in one or several of the following areas: software engineering, networking, or network commerce
- understand a broad range of topics in information technology
- design, manage and develop software systems and networks in an effective manner
- lead discussions relating to the computing aspects of their workplace
- become better problem-solvers and innovative thinkers, who are able to learn new skills independently and efficiently and consequently to succeed in a competitive professional environment
- 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 technology by selecting and using either quantitative or qualitative techniques appropriate to the resolution of technological problems
- satisfy academic admission requirements for membership of relevant professional bodies
- identify, interpret and evaluate major issues in a range of contemporary business information technology areas
- apply acquired knowledge associated with their studies to work environments
- articulate the principal theories, concepts and applications associated with their selected business information technology area(s)
- understand and act in accordance with the ethics of their profession.

Admission requirements

Applicants with the following qualifications may be accepted into the program:

- a Bachelor's degree from a recognised University;
- an approved qualification at least equivalent to the above; or
- A Diploma in IT from a recognised institution of higher learning or polytechnic with at least 2 years industry IT experience.

In addition, before being admitted to the program, applicants must have acquired the knowledge and skills equivalent to that contained in the following USQ courses:

- [MAT1101 Discrete Mathematics for Computing](#)
- [CSC1401 Foundation Programming](#).

This knowledge and skills can be acquired by:

- completing these courses as a USQ student in an award or non-award program;
- studying equivalent courses at other universities; or
- work experience, in which case applicants will need to provide suitable evidence of the acquisition of the skills and knowledge.

International Applicants

International applicants must have met the [University's English language](#) requirements or have completed the [University's ELICOS/EAP programs](#) .

Program fees

Commonwealth supported place

A Commonwealth supported place is where the Australian Government makes a contribution towards the cost of your higher education and you as a student pay a [student contribution amount](#), which varies depending on the courses undertaken. You are able to calculate the fees for a particular course via the [Course Fee Finder](#). Commonwealth Supported students may be eligible to defer their fees through a Government loan called [HECS-HELP](#).

Domestic full fee paying place

Domestic full fee paying places are funded entirely through the full fees paid by the student. Full fees vary depending on the courses that are taken. You are able to calculate the fees for a particular course via the [Course Fee Finder](#).

Domestic full fee paying students may be eligible to defer their fees through a Government loan called [FEE-HELP](#).

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

The Master of Information Technology (Professional) consists of 12 units of courses, subject to the following restrictions:

- at least six units of Level 8 courses of which at most two may come from outside the following Group 3 CSC courses
- no Level 1 courses will be credited towards the program
- no more than three units of courses may be at Level 2
- no more than two units of courses at Level 2 and 3 may come from outside the following Group 1 and Group 2 CSC courses.

Students want to select courses from outside the following table have to be approved by the Program Coordinator.

Group 1 Courses		
Semester 1	Semester 2	Semester 3
CSC2401 Algorithms and Data Structures	CSC2406 Web Technology	
CSC2402 Object-Oriented Programming in C++		
csc2408	CSC2404 Operating Systems	
CSC2409 High Performance Numerical Computing	CSC2408 Software Development Tools	
Group 2 Courses		
Semester 1	Semester 2	Semester 3
CSC3400 Database Systems		
CSC3403 Comparative Programming Languages	CSC3413 Network Design and Analysis	
CSC3407 Network Fundamentals and Routing		
csc3412	CSC3427 Switching, Wireless and WAN Technologies	

Group 3 Courses		
Semester 1	Semester 2	Semester 3
CSC8407 Wireless and Internet Technology	CSC8417 Advanced Web Data Management	
CSC8410 Independent Studies in Computing/Mathematics/Statistics A	CSC8409 XML and Semantic Web Services	
	CSC8411 Independent Studies in Computing/Mathematics/Statistics B	
CSC8419 Cryptography and Security	CSC8418	
CSC8480 Computing Complementary Studies A	CSC8490 Computing Complementary Studies B	
csc8416	csc8408	
	csc8415	

Students may undertake a strand in one of the fields shown in the following table by completing the associated courses. Note that it is not compulsory to undertake a strand in this program. A strand represents a grouping of related courses.

Strand	Course to Complete the Strand
Web Technology	CSC2408 Software Development Tools
	CSC3400 Database Systems
	CSC3407 Network Fundamentals and Routing
	CSC3412 System and Security Administration
	CSC8408 e-Commerce Technology
	CSC8409 XML and Semantic Web Services
	CSC8416 Advanced Programming in Java
	CSC8417 Advanced Web Data Management
	Four electives subject to the restrictions listed in the Program Structure
Software Engineering	CSC2407 Introduction to Software Engineering
	CSC2408 Software Development Tools
	CSC3400 Database Systems
	CSC8408 e-Commerce Technology
	CSC8416 Advanced Programming in Java
	CSC8415 Computer Network Programming
	CSC8418
	Five electives subject to the restrictions listed in the Program Structure
Networking and System Security	CSC3412 System and Security Administration
	CSC2408 Software Development Tools
	CSC3407 Network Fundamentals and Routing
	CSC3413 Network Design and Analysis
	CSC8407 Wireless and Internet Technology
	CSC8408 e-Commerce Technology
	CSC8415 Computer Network Programming
	CSC8419 Cryptography and Security
	Four electives subject to the restrictions listed in the Program Structure

This list of postgraduate courses may vary from time to time as the range of courses offered within the University changes. Individual postgraduate courses which are relevant to the goals of a student and consistent with the purposes of this program may be allowed at the discretion of the Program Coordinator.

Required time limits

Students have a maximum of 6 years to complete this program.

IT requirements

All students are required to have access to the Internet and to a personal computer running Microsoft Windows and Linux. The Department provides assistance with installing Linux for students who may not have done so before. Note that at <http://www.usq.edu.au/ict/students/standards/default.htm>, USQ makes recommendations about the type of hardware and software best suited to match our systems. Compliance with these recommendations will ensure students receive the computing help needed if experiencing problems.

Macintosh computers are not recommended due to the software used in the courses.

Software is specified on a course-by-course basis and, in some instances, it is provided with the textbook required for the course.

The University has installed a wireless network for students' computers. In order to take advantage of this facility and further enhance their on-campus learning environment, students should consider purchasing a notebook/laptop computer with wireless connectivity. A notebook/laptop may be required for some courses.

Exit points

Students enrolled in this Master's program who wish to exit without completing the program may be awarded the Graduate Diploma of Professional Computing (GDPC) if they have completed at least eight units or the Graduate Certificate in Professional Computing (GCPC) if they have completed at least four units.

Recommended enrolment pattern

There is no recommended enrolment pattern for this program. Students should select their own, using the list provided at <http://www.sci.usq.edu.au/courses/> keeping in mind the requirements to graduate outlined above in the Program Structure. If unsure about a suitable enrolment pattern, students should contact the Program Coordinator.