# Master of Computing Technology, Master of Computing Technology (Extended) (MCOTorMCTE) - MCOT, MCTE

CRICOS code (International applicants): Master of Computing Technology (MCOT) 069702M; Master of Computing Technology (Extended) (MCTE) 069703K

	On-campus*	Distance education*		
Semester intake:	Semester 1 (February)	Semester 1 (February)		
	Semester 2 (July)	Semester 2 (July)		
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:	MCOT: 1.5 years full-time, 3 years part-time, 4.5 years maximum. MCTE: 2 years full-time, 4 years part-time, 6 years maximum.			
Program articulation:	From: Graduate Diploma of Information Technology (Faculty of Sciences) To: Master of Computing Technology, Master of Computing Technology (Extended)			

#### **Footnotes**

#### Contact us

Future Australian and New Zealand students	Future International students	<b>Current students</b>	
Ask a question	Ask a question	Ask a question	
Freecall (within Australia): 1800	Phone: +61 7 4631 5543	Freecall (within Australia): 1800	
269 500	Email: international@usq.edu.au	007 252	
Phone (from outside Australia): +61		Phone (from outside Australia): +61	
7 4631 5315		7 4631 2285	
Email: studysci@usq.edu.au		Email: usq.support@usq.edu.au	

## **Program focus**

The Master of Computing Technology (MCOT) and Master of Computing Technology (Extended) (MCTE) are vocationally and academically-oriented programs. With majors in Networking and System Security, Software and the Web, MCOT and MCTE provide graduates with skills and knowledge in key areas of computing which relate to their needs and the needs of their profession or industry. In addition, students studying the Master of Computing Technology (Extended) may undertake a four-unit project and research training to qualify them for USQ PhD studies.

#### 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 Master of Computing Technology and Master of Computing Technology (Extended) aim to produce graduates coming from any discipline who can work as web information professionals, system and network administrators, database administrators, database designers, IT managers or software engineers.

Please contact the Program Coordinator for more information about articulating into the; Master of Computing Technology, Master of Computing Technology (Extended)

## **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
- 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.

Graduates may be able to pursue USQ Doctor of Philosophy (PhD) if the program includes 4 units of research (MSC8001 and MSC8002) and achieve a GPA of 5.5 or higher.

### **Admission requirements**

To qualify for entry to the program, applicants must:

- (1) hold a Bachelor's degree from an Australian university or equivalent and
- (2) have introductory knowledge of computing, consistent with that found in:
- MAT1101 Discrete Mathematics for Computing and
- CSC1401 Foundation Programming and
- CIS1000 Information Systems Concepts

This knowledge and skills can be acquired by:

Application for postgraduate programs may be made directly to USQ. You should ensure you submit your application by the closing dates.

### **International students 2011**

This program is offered to international students. An international student is a person who is not an Australian or New Zealand citizen and not an Australian permanent resident. Please refer to USQ International for information about entry requirements, visa arrangements and how to apply.

## **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.

- no Level 3 course from outside the following Group 2 CSC courses is included
- no more than four units of courses may be at level 2
- no more than two units of courses at Level 2 may come from outside the following Group 1 CSC courses.

Students with a degree equivalent at least to an Australian Bachelor degree may be eligible for up to 2 block credits in the MCTE. These credits will be awarded in accordance to guidelines set by the Faculty of Sciences. No further exemptions or credits for previous study will be permitted except for incomplete studies and those listed in the Articulation section.

Students who want to select courses from outside the following table need approval by the Program Coordinator.

Gr				

Major			
Software and the Web	CSC2406 Web Technology		
	CSC2407 Introduction to Software Engineering		
	CSC2408 Software Development Tools		
	CSC3400 Database Systems		
	CSC3403 Comparative Programming Languages		
	CSC3407 Network Fundamentals and Routing		
	CSC8409 XML and Semantic Web Services		
	CSC8416 Advanced Programming in Java		
	CSC8417 Advanced Web Data Management		
	CSC8420 Mobile Systems		
Naturalia and Cartan Carrier	CCC2402 Olive Olive I Processing in Co.		
Networking and System Security	CSC2402 Object-Oriented Programming in C++		
	CSC2408 Software Development Tools		
	CSC3412 System and Security Administration		
	CSC3407 Network Fundamentals and Routing		
	CSC3413 Network Design and Analysis		
	CSC3427 Switching, Wireless and WAN Technologies		
	CSC8407 Wireless and Internet Technology		
	CSC8421 Network Security		
	CSC8415 Computer Network Programming		
	CSC8419 Cryptography and Security		
	Two level 8 electives subject to the restrictions listed in the Program Structure		
	MCTE: Four CSC electives *\(^{\subset}\)subject to the restrictions listed in the Program Structure*#		

#### Footnotes

- ^ CSC electives are USQ courses whose course code start with CSC2xxx, CSC3xxx or CSC8xxx.
- \* Student must replace the four CSC electives with MSC8001 and MSC8002 if they wish to enrol in USQ PhD program after completing MCTE.
- # Both MSC8001 and MSC8002 are 2 unit courses.

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 4.5 years to complete MCOT and 6 years to complete MCTE.

## 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.

Students should visit the USQ minimum computing standards to check that their computers are capable of running the appropriate software and versions of Internet web browsers and to check the minimum and recommended standards for software.

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.

#### **Articulation**

Upon successful completion of the GDTI Graduate Diploma of Information Technology (Faculty of Sciences), students may articulate into the Master of Computing Technology (MCOT) with up to a maximum of four credit units exemption from the GDTI to MCOT in accordance with the MCOT requirements.

Upon successful completion of the GDTI Graduate Diploma of Information Technology (Faculty of Sciences), students may articulate into the Master of Computing Technology (Extended) (MCTE) with up to a maximum of four credit units exemption from the GDTI to MCTE in accordance with the MCTE requirements.

## PhD Program entry requirements

Students wishing to enrol in the USQ Doctor of Philosophy (PhD) program must complete the Master of Computing Technology (Extended) which

- includes MSC8001 and MSC8002
- inthhes at least four level 8 CSC courses
- no Level 1 courses is included
- no Level 3 courses from outside the Group 2 CSC courses are included
- no more than four units of courses at Level 2 are included
- no more than two units of courses at Level 2 included may come from outside the following Group 1 CSC courses
- achieve a GPA of 5.5 or higher.

### **Exit points**

Students enrolled in the MCOT program who wish to exit without completing the program may be awarded

• the Graduate Diploma of Professional Computing (GDPC) if the