

Master of Computing (MCOP) - MComp

CRICOS code (International applicants): 030284A

	On-campus*	Distance education*
Semester intake:	Semester 1 (March) Semester 2 (July)	Semester 1 (March) Semester 2 (July) Semester 3 (November)
Campus:	Toowoomba	-
Fees:	Commonwealth supported place International full fee paying place	Commonwealth supported place International full fee paying place
Standard duration:	1.5 years full-time, 3 years part-time, 4.5 years maximum	
Program articulation:	From: Graduate Diploma of Information Technology (Faculty of Sciences) ; Master of Computing Technology (MCOT)	

Footnotes

* Please consult the Program Coordinator for more details about the articulation from the;

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

This program provides students with the opportunity to add to their knowledge and skills obtained in an undergraduate program in computing. This will be accomplished by students undertaking coursework of a different type or at a higher level than in their undergraduate program. In addition, students studying the Master of Computing will undertake a four-unit project, and research training to qualify them for PhD studies.

Program objectives

The general objective of the Master of Computing is to produce graduates who possess high-level skills in computing theory, practice and research, who are attractive to employers, and are able to contribute to an appropriate professional body. Graduates will be able to pursue further studies, such as a [Doctor of Philosophy](#), will be able to contribute to the discipline of computing, take advantage of research literature, and have an understanding of how to undertake their own research.

Graduates will be able to:

- design, manage and develop complex software systems in an effective manner
- understand a broad range of topics in theoretical computer science
- undertake a study of the literature in an area of computer science and make an assessment of that area
- apply theoretical concepts from computer science to appropriate computing problems
- identify computing problems requiring further research and develop research methods for those problems.

Admission requirements

To be considered for entry to the program applicants must:

- hold a Bachelor's degree from a recognised University in the field of computing; or
- have completed either the [Graduate Diploma of Information Technology \(Faculty of Sciences\)](#), the Graduate Diploma of Professional Computing or the Graduate Diploma of Advanced Computing through USQ; or
- have an approved qualification at least equivalent to one of the above.

International Applicants

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

How to apply

Domestic students

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

International students

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](#). Commonwealth Supported students may be eligible to defer their fees through a Government loan called [HECS-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

To be eligible for the award of Master of Computing, each student is required to complete at least eight units of coursework and a four-unit research project. Any courses completed as part of an undergraduate program for which an award has been given, will not attract credit for the Master of Computing. Exemptions or credit for previous study will not be permitted except for incomplete studies.

Required time limits

Students have a maximum of 4.5 years to complete this program.

Coursework

The coursework will consist of courses chosen from those in the table below.

At least four courses will be from Level 8 as listed in the Group 1 Courses. Exemptions or credit for previous study will not be permitted except for incomplete studies. However, if deemed appropriate with the aims of the program, and subject to approval by the Program Coordinator, students may include up to three units of other study at the appropriate level.

Coursework	
Group 1 Courses	
Semester 1	Semester 2
CSC8407 Wireless and Internet Technology*	CSC8417 Advanced Web Data Management
CSC8410 Independent Studies in Computing/Mathematics/Statistics A	CSC8409 XML and Semantic Web Services*
CSC8416 Advanced Programming in Java	CSC8411 Independent Studies in Computing/Mathematics/Statistics B
CSC8418	CSC8490 Computing Complementary Studies B
CSC8480 Computing Complementary Studies A	CSC8408 e-Commerce Technology
CSC8419 Cryptography and Security	CSC8415 Computer Network Programming
Group 2 Courses	
Semester 1	Semester 2
CSC3400 Database Systems	
CSC3403 Comparative Programming Languages	CSC3413 Network Design and Analysis
CSC3412 System and Security Administration	
CSC3407 Network Fundamentals and Routing	CSC3419 XML and the Web*
CSC3420 Mobile Internet Technology*	CSC3427 Switching, Wireless and WAN Technologies

Footnotes

* Students who have completed [CSC3420 Mobile Internet Technology](#) may not enrol in [CSC8407 Wireless and Internet Technology](#), and vice versa. Similarly, students who have completed [CSC3419 XML and the Web](#) may not enrol in [CSC8409 XML and Semantic Web Services](#), and vice versa.

Research

In addition to the coursework, each student is required to complete a four-unit research project. To satisfy this requirement, students will complete both of the two-unit courses, [MSC8001 Research Project Methodology](#) and [MSC8002 Research Project Dissertation](#). Subject to approval by the Postgraduate Coordinator, these courses may be taken in Semester 1 or 2.

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 acceptable but 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 Advanced Computing (GDAC) if they have completed at least eight units or the Graduate Certificate in Advanced Computing (GCAC) if they have completed at least four units in accordance with the requirements of the Master of Computing.

PhD program entry requirements

Students wishing to articulate from the Master of Computing into the USQ Doctor of Philosophy (PhD) program may satisfy the entry requirements for that program in one of the following two ways:

- Complete the Master of Computing, and achieve a GPA of 5.5 or higher;
- Exit the MCOP via the Graduate Diploma of Advanced Computing (GDAC) having completed 4 level 8 courses and 4 units of research with a GPA of 6.5 or higher.

Recommended enrolment pattern

The following enrolment patterns represents possible plans and may be modified to suit individual needs. Students should plan their enrolment making sure that they have fulfilled all requirements as shown in the program structure information. Enrolment requirements must be satisfied before enrolling in a course. If unsure about a suitable enrolment pattern, students should contact the Program Coordinator.

Semester 1 Intake

First Year	
S1	S2
CSC3407 Network Fundamentals and Routing	MSC8001 Research Project Methodology (2 units)
CSC3412 System and Security Administration	
CSC8407 Wireless and Internet Technology	CSC3427 Switching, Wireless and WAN Technologies
CSC8418	CSC8409 XML and Semantic Web Services

Second Year	
S1	S2
MSC8002 Research Project Dissertation (2 units)	
CSC3400 Database Systems	
CSC8419 Cryptography and Security	

Semester 2 Intake

First Year	
S1	S2
	CSC3413 Network Design and Analysis
	CSC8408 e-Commerce Technology
	CSC8417 Advanced Web Data Management
	CSC8409 XML and Semantic Web Services

Second Year	
S1	S2
MSC8001 Research Project Methodology (2 units)	MSC8002 Research Project Dissertation (2 units)
CSC3407 Network Fundamentals and Routing	CSC3427 Switching, Wireless and WAN Technologies
CSC3412 System and Security Administration	CSC8415 Computer Network Programming