

Master of Computing (MCOP) - MComp

CRICOS code (International applicants): 066847G

	On-campus*	Distance education*
Semester intake:	Semester 1 (February) Semester 2 (July)	Semester 1 (February) 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:	1.5 years full-time, 3 years part-time, 4.5 years maximum	
Program articulation:	From: Graduate Diploma of Information Technology (Faculty of Sciences)	

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 269 500 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: usq.support@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.

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 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 qualify for entry to the program applicants must:

- hold a Bachelor's degree from an Australian University in the field of computing; **OR**
- 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/EAP programs](#) .

How to apply

Domestic students

[Application for postgraduate programs](#) may be made directly to USQ.

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](#).

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](#).

Permanent Humanitarian Visa holders, Permanent Resident visa holders and New Zealand citizens who reside outside Australia pay full tuition fees.

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

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	CSC8408 e-Commerce Technology
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
CSC8417 Advanced Web Data Management	CSC8415 Computer Network Programming
CSC8419 Cryptography and Security	CSC8420 Mobile Systems
CSC8480 Computing Complementary Studies A	CSC8490 Computing Complementary Studies B
Group 2 Courses	
Semester 1	Semester 2
CSC3400 Database Systems	CSC3413 Network Design and Analysis
CSC3403 Comparative Programming Languages	CSC3427 Switching, Wireless and WAN Technologies
CSC3412 System and Security Administration	
CSC3407 Network Fundamentals and Routing	

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.

Articulation

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

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

PhD program entry requirements

Students wishing to enrol in 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.

Exemptions

Exemptions or credits for previous study other than those listed in the Articulation section will not be permitted in the MCOP except for incomplete studies.

Recommended enrolment pattern

The following enrolment patterns represent 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
<p>Choose two of the following: CSC3407 Network Fundamentals and Routing CSC3412 System and Security Administration CSC3400 Database Systems</p>	<p>Choose one of the following: CSC3413 Network Design and Analysis CSC3427 Switching, Wireless and WAN Technologies</p>
<p>Choose two of the following: CSC8407 Wireless and Internet Technology CSC8416 Advanced Programming in Java CSC8417 Advanced Web Data Management CSC8419 Cryptography and Security CSC8480 Computing Complementary Studies A</p>	<p>Choose one of the following: CSC8408 e-Commerce Technology CSC8409 XML and Semantic Web Services CSC8411 Independent Studies in Computing/Mathematics/Statistics B CSC8415 Computer Network Programming CSC8420 Mobile Systems CSC8490 Computing Complementary Studies B</p>
	<p>MSC8001 Research Project Methodology (2 units)</p>

Second Year	
S1	S2
MSC8002 Research Project Dissertation (2 units)	
Choose one of the following CSC3407 Network Fundamentals and Routing CSC3412 System and Security Administration CSC3400 Database Systems	
Choose one of the following: CSC8407 Wireless and Internet Technology CSC8416 Advanced Programming in Java CSC8417 Advanced Web Data Management CSC8419 Cryptography and Security CSC8480 Computing Complementary Studies A	

Semester 2 Intake

First Year	
S1	S2
	Choose one of the following: CSC3413 Network Design and Analysis CSC3427 Switching, Wireless and WAN Technologies
	Choose three of the following CSC8408 e-Commerce Technology CSC8409 XML and Semantic Web Services CSC8411 Independent Studies in Computing/Mathematics/Statistics B CSC8415 Computer Network Programming CSC8420 Mobile Systems CSC8490 Computing Complementary Studies B

Second Year	
S1	S2
MSC8001 Research Project Methodology (2 units)	MSC8002 Research Project Dissertation (2 units)
Choose one of the following: CSC3407 Network Fundamentals and Routing CSC3412 System and Security Administration CSC3400 Database Systems	Choose one of the following: CSC3413 Network Design and Analysis CSC3427 Switching, Wireless and WAN Technologies
Choose one of the following: CSC8407 Wireless and Internet Technology CSC8416 Advanced Programming in Java CSC8417 Advanced Web Data Management CSC8419 Cryptography and Security CSC8480 Computing Complementary Studies A	Choose one of the following: CSC8408 e-Commerce Technology CSC8409 XML and Semantic Web Services CSC8411 Independent Studies in Computing/Mathematics/Statistics B CSC8415 Computer Network Programming CSC8420 Mobile Systems CSC8490 Computing Complementary Studies B