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

The Master of Computing Technology (MCOT) and Master of Computing Technology (Extended) (MCTE) will accept no new admissions from Semester 1, 2015. Students who are interested in this study area should consider the new Master of Computing Technology (MCTN) which will be offered from Semester 1, 2015. If you would like further information, please contact us.

| | On-campus* | External* |
|--------------------------|---|---|
| Semester intake: | No new admissions | No new admissions |
| 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 To: Master of Computing Technology, Master of Computing Technology (Extended) | |

Footnotes

* Please contact the Faculty of Health, Engineering and Sciences for more information about articulating into the ; Master of Computing Technology, Master of Computing Technology (Extended)

Contact us

Consult the Handbook on the Web at http://www.usq.edu.au/handbook/current for any updates that may occur during the year. (DISCONTINUED) Master of Computing Technology, Master of Computing Technology (Extended) (MCOTorMCTE) - MCOT, MCTE (2016)

- 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:

- completing these courses as a USQ student in an award or non-award program; or
- 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.

All students are required to satisfy the applicable English language requirements.

If you do not meet the English language requirements you may apply to study a University-approved English language program. On successful completion of the English language program, you may be admitted to an award program.

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.

| CSC2408 Software Development Tools | CSC2404 Operating Systems | |
|--|--|--|
| | CSC2406 Web Technology 1 | |
| MAT2409 High Performance Numerical Computing | CSC2407 Introduction to Software Engineering | |
| | CSC2408 Software Development Tools | |
| Group 2 Courses | | |
| Semester 1 | Semester 2 | |
| CSC3400 Database Systems | CSC3413 Network Design and Analysis | |
| CSC3403 Comparative Programming Languages | _ | |
| CSC3407 Network Fundamentals and Routing | CSC3427 Switching, Wireless and WAN Technologies | |
| CSC3412 System and Security Administration | | |
| Group 3 Courses | | |
| Semester 1 | Semester 2 | |
| CSC8407 Wireless and Internet Technology | CSC8409 XML and Semantic Web Services | |
| CSC8410 Independent Studies in | CSC8411 Independent Studies in | |
| Computing/Mathematics/Statistics A | Computing/Mathematics/Statistics B | |
| CSC8419 Cryptography and Security | CSC8420 Mobile Systems | |
| CSC8480 Computing Complementary Studies A | CSC8490 Computing Complementary Studies B | |
| CSC8416 Advanced Programming in Java | CSC8421 Network Security | |
| CSC8417 Advanced Web Data Management | CSC8415 Computer Network Programming | |
| MSC8001 Research Project I*# | MSC8001 Research Project I*# | |
| | | |

Footnotes

* Enrolment into the courses MSC8001 and MSC8002 are subjected to availability of research projects and approval from project supervisors.
Both MSC8001 and MSC8002 are 2 unit courses.

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

| Major | Courses for the major |
|----------------------|---|
| Software and the Web | CSC2406 Web Technology 1 |
| | 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 |
| | Two level 8 electives subject to the restrictions listed in the Program Structure |
| | MCTE: Four CSC electives^ subject to the restrictions listed in the Program Structure*# |

| 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 ^subject to the restrictions listed in the Program Structure*# |

Footnotes

Λ 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 Faculty of Health, Engineering and Sciences.

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

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Upon successful completion of the GDTI Graduate Diploma of Information Technology, 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
- includes 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 they have completed at least eight units (excluding exemptions and credit transfers); *or*
- the Graduate Certificate of Professional Computing (GCPC) if they have completed at least four units (excluding exemptions and credit transfers) in accordance with the MCOT requirements.

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

- the Graduate Certificate of Professional Computing (GCPC) if they have completed, in accordance with the MCTE requirements, at least four units (excluding exemptions and credit transfers); *or*
- the Graduate Diploma of Professional Computing (GDPC) if they have completed, in accordance with the MCOT requirements, at least eight units (excluding exemptions and credit transfers); *or*
- MCOT if they completed at least 12 units in accordance with the requirements of MCOT.

Credit

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

No exemptions or credits for previous study will be permitted in MCOT except for incomplete studies and those listed in the Articulation section.

Recommended Enrolment Pattern

Students are able to enrol in any offered mode of a course (on-campus, external or online), regardless of the program mode of study they enrolled in.

Students should select their own courses, using the list provided at Program structure keeping in mind timetable constraints and the requirements to graduate outlined also in the Program Structure. If unsure about a suitable enrolment pattern, students should contact the Faculty of Health, Engineering and Sciences.