Master of Computing (MCOP) - MComp

This program is offered only to continuing students. No new admissions will be accepted. Students who are interested in this study area should contact us.

<table>
<thead>
<tr>
<th></th>
<th>On-campus^</th>
<th>Online^</th>
</tr>
</thead>
<tbody>
<tr>
<td>Start:</td>
<td>No new admissions</td>
<td>No new admissions</td>
</tr>
<tr>
<td>Campus:</td>
<td>Toowoomba</td>
<td>-</td>
</tr>
<tr>
<td>Fees:</td>
<td>Commonwealth supported place</td>
<td>Commonwealth supported place</td>
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<tr>
<td></td>
<td>Domestic full fee paying place</td>
<td>Domestic full fee paying place</td>
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<tr>
<td></td>
<td>International full fee paying place</td>
<td>International full fee paying place</td>
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<tr>
<td>Standard duration:</td>
<td>1.5 years full-time, 3 years part-time, 4.5 years maximum</td>
<td></td>
</tr>
<tr>
<td>Program articulation:</td>
<td>From: Graduate Diploma of Information Technology</td>
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</tr>
</tbody>
</table>

Notes:
Please consult the Faculty of Health, Engineering and Sciences for more information about articulation from the ; Graduate Diploma of Information Technology.

Footnotes
^ No new admissions into this program

Contact us

Current students
Ask a question
Freecall (within Australia): 1800 007 252
Phone (from outside Australia): +61 7 4631 2285
Email: usq.support@usq.edu.au

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.

On graduation from this program, students will be able to:

- design, manage and develop complex software systems in an effective manner, using concepts of professionalism and ethical practice
- summarise and explain key components of a broad range of topics in theoretical computer science by communication (both written and verbally) using appropriate interpersonal skills and team work
- 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 in diverse contexts
- identify computing problems requiring further research and develop a research plan for those problems.

Admission requirements
To be eligible for admission, applicants must satisfy the following requirements:

- Completion of an Australian university three-year Bachelor degree in the area of computing, or equivalent.

or
Completion of either the Graduate Diploma of Information Technology, the Graduate Diploma of Professional Computing or the Graduate Diploma of Advanced Computing through UniSQ, or equivalent.

- English Language Proficiency requirements for Category 3.

All students are required to satisfy the applicable English language requirements. If students do not meet the English language requirements they may apply to study a University-approved English language program. On successful completion of the English language program, students 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 a students’ higher education and students pay a student contribution amount, which varies depending on the courses undertaken. Students are able to calculate the fees for a particular course via the Course Fee Schedules.

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. Students are able to calculate the fees for a particular course via the Course Fee Schedule.

Domestic full fee paying students may be eligible to defer their fees through a Government loan called FEE-HELP provided they meet the residency and citizenship requirements.

Australian citizens, Permanent Humanitarian Visa holders, Permanent Resident visa holders and New Zealand citizens who will be resident outside Australia for the duration of their program pay full tuition fees and are not eligible for 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, external or online. Students are able to calculate the fees for a particular course via the Course Fee Schedules.

**Program structure**
To be eligible for the award of Master of Computing, each student is required to complete a four unit research project (MSC8001 and MSC8002), CSC8600, CIS5310 IS/ICT Project Management, and at least six units found in the coursework table below. 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.

Students seeking Skill Accreditation, or other accreditations from professional bodies such as the Australian Computer Society, should seek advice from the professional bodies before they apply for credits or exemptions.

*In Semester 3, 2023 this course will be delivered as a Transition (9 week) semester, commencing on 13 November 2023 and concluding on 12 January 2024.*

**Required time limits**
Students have a maximum of 4.5 years to complete this program.

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

At least three courses will be 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 Faculty of Health, Engineering and Sciences, students may include up to three units of other study at the appropriate level.

Students seeking Skill Accreditation, or other accreditations from professional bodies such as the Australian Computer Society, should seek advice from the professional bodies before they apply for credits or exemptions.

<table>
<thead>
<tr>
<th>Coursework</th>
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<tbody>
<tr>
<td><strong>Group 1 Courses</strong></td>
</tr>
<tr>
<td>Semester 1</td>
</tr>
<tr>
<td>CSC8407</td>
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<tr>
<td>CSC8410 Independent Studies in Computing/Mathematics/Statistics A</td>
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<tr>
<td>CSC8416</td>
</tr>
<tr>
<td>CSC8422 Web Data Visualisation</td>
</tr>
<tr>
<td>CSC8419</td>
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<tr>
<td><strong>Group 2 Courses</strong></td>
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<tr>
<td>Semester 1</td>
</tr>
<tr>
<td>CSC8500 Advanced Relational Database Design and Technology</td>
</tr>
<tr>
<td>CSC8503 Principles of Programming Languages</td>
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<tr>
<td>CSC8512 Advanced System Administration</td>
</tr>
<tr>
<td>CSC8507 Networking Technologies</td>
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</tbody>
</table>

**Footnotes**

# This course replaces CSC8409 which has been discontinued.

+ CSC8416 Advanced Programming in Java will not be offered in S1 2021, replacement course options are: CSC8407, CSC8410, CSC8480, CSC8101, CSC8004, CIS8708, CIS8500.

**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 and MSC8002. 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 School provides assistance with installing Linux for students who may not have done so before.

Students should visit the UniSQ 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 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 Graduate Diploma of Information Technology, students may articulate into the Master of Computing with up to a maximum of four units' credit.

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 of 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 may apply to enrol in UniSQ's Doctor of Philosophy program upon successful completion of the Master of Computing, if they meet the entry requirements. Alternatively, students may be interested in applying for the Doctor of Applied Science.

Credit

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

Students seeking Skill Accreditation, or other accreditations from professional bodies such as the Australian Computer Society, should seek advice from the professional bodies before they apply for credits or exemptions.

Recommended enrolment pattern - Semester 1 intake

The following enrolment pattern 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 Faculty of Health, Engineering and Sciences.

<table>
<thead>
<tr>
<th>Course</th>
<th>Year of program and semester in which course is normally studied</th>
<th>Enrolment requirements</th>
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<tbody>
<tr>
<td></td>
<td>On-campus (ONC)</td>
<td>External (EXT)</td>
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<tr>
<td></td>
<td>Year</td>
<td>Sem</td>
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</table>

Year 1, Semester 1

Choose two of the following:

CSC8500 Advanced Relational Database Design and Technology 1 1 1 1
CSC8503 Principles of Programming Languages 1 1 1 1
CSC8512 Advanced System Administration 1 1 1 1
CSC8507 Networking Technologies 1 1 1 1

Choose two of the following:

CSC8407 1 1 1 1
CSC8416 + 1 1 1 1
CSC8422 Web Data Visualisation 1 1 1 1
CSC8419 1 1 1 1
CSC8480 Computing Complementary Studies A 1 1 1 1

Year 1, Semester 2

MSC6001 Research Project I + 1 2 1 2 Pre-requisite: Students must be enrolled in one of the following Programs: MCTN or M2121MSC6001 Research Project I

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Enrolment requirements

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<td>External (EXT)</td>
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<tr>
<td></td>
<td>Year</td>
<td>Sem</td>
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<tr>
<td>Year 1, Semester 2</td>
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<tr>
<td>CIS5310 IS/ICT Project Management£</td>
<td>1</td>
<td>1</td>
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<tr>
<td>Choose one of the following:</td>
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<td></td>
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<tr>
<td>CSC8513 Network Performance Analysis</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CSC8527 Scaling and Connecting Networks</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CSC8421</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CSC8426 #</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CSC8411 Independent Studies in Computing/Mathematics/Statistics B</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CSC8415 Computer Network Programming</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CSC8420 Mobile Systems</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>CSC8490</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Year 2, Semester 1</td>
<td></td>
<td></td>
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<tr>
<td>MSC6002 Research Project I+</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Choose one of the following:</td>
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<td></td>
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<tr>
<td>CSC8407</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>CSC8416 +</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>CSC8422 Web Data Visualisation</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>CSC8419</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>CSC8480 Computing Complementary Studies A</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Footnotes:

+ CSC8416 Advanced Programming in Java will not be offered in S1 2021, replacement course options are: CSC8407, CSC8410, CSC8480, CSC8101, CSC8004, CIS8708, CIS8500.
* Two units
£ In Semester 3, 2023 this course will be delivered as a Transition (9 week) semester, commencing on 13 November 2023 and concluding on 12 January 2024
# This course replaces CSC8409, which has been discontinued.

Recommended Enrolment Pattern - Semester 2 intake
The following enrolment pattern 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 Faculty of Health, Engineering and Sciences.
Consult the Handbook on the Web at https://www.unisq.edu.au/handbook/current for any updates that may occur during the year.

(DISCONTINUED) Master of Computing (MCOP) - MComp (2023)

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<tr>
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<tbody>
<tr>
<td></td>
<td>Year</td>
<td>Sem</td>
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<tr>
<td></td>
<td>Year</td>
<td>Sem</td>
</tr>
</tbody>
</table>

Choose two of the following:

- **CSC8426**: 1 2 1 2
- **CSC8411 Independent Studies in Computing/Mathematics/Statistics B**: 1 2 1 2 Pre-requisite: Students must be enrolled in one of the following Programs: MSCN or MCTN
- **CSC8415 Computer Network Programming**: 1 2 1 2
- **CSC8420 Mobile Systems**: 1 2 1 2
- **CSC8490**: 1 2 1 2

**Year 2, Semester 1**

- **MSC6001 Research Project I**: 2 1 2 1 Pre-requisite: Students must be enrolled in one of the following Programs: MCTN or M COP or MCTE or MSCN or MCOO or MADS or have the approval of their program coor dinator
- **CSC8200 Advanced ICT Professional Project**: 2 1 2 1 Pre-requisite: CIS5310 and Students must have successfully completed 12 units prior to enrolment in this course

Choose one of the following:

- **CSC8500 Advanced Relational Database Design and Technology**: 2 1 2 1
- **CSC8503 Principles of Programming Languages**: 2 1 2 1
- **CSC8512 Advanced System Administration**: 2 1 2 1
- **CSC8507 Networking Technologies**: 2 1 2 1
- **CSC8407**: 2 1 2 1

**Year 2, Semester 2**

- **MSC6002 Research Project II**: 2 2 2 2 Pre-requisite: MSC6001 or MSC6001

Choose one of the following:

- **CSC8513 Network Performance Analysis**: 2 2 2 2
- **CSC8527 Scaling and Connecting Networks**: 2 2 2 2

Choose one of the following:

- **CSC8421**: 2 2 2 2
- **CSC8426**: 2 2 2 2
- **CSC8411 Independent Studies in Computing/Mathematics/Statistics B**: 2 2 2 2 Pre-requisite: Students must be enrolled in one of the following Programs: MSCN or MCTN
- **CSC8415 Computer Network Programming**: 2 2 2 2
- **CSC8420 Mobile Systems**: 2 2 2 2
- **CSC8490**: 2 2 2 2

Footnotes

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Two units

CSC8416 Advanced Programming in Java will not be offered in S1 2021, replacement course options are: CSC8407, CSC8410, CSC8480, CSC8101, CSC8004, CIS8708, CIS8500.