

Program Information for Master of Computer Science suite

Acknowledgement of Country

The University of Queensland (UQ) acknowledges the Traditional Owners and their custodianship of the lands on which we meet.

We pay our respects to their Ancestors and their descendants, who continue cultural and spiritual connections to Country.

We recognise their valuable contributions to Australian and global society.

The Brisbane River pattern from A Guidance Through Time by Casey Coolwell and Kyra Mancktelow.





Plan For Today's Session

Duration	Activity
12:00pm - 12:15pm	Welcome & Introductions
12:15pm - 12:30pm	Program Information
12:30pm - 12:45pm	Q&A
12:45pm – 1:00pm	Icebreaker
1:00pm - 2:00pm	Expo & lunch @ UQ Centre



About me (Dr Larissa Meinicke)

- Senior Lecturer at the School of Electrical Engineering and Computer Science.
- Program convenor for the Master of Computer Science Suite.
- Teaches advanced programming courses like Compilers and Interpreters (COMP4403) and Advanced Algorithms and Data Structures (COMP4500/7500).
- Researches formal methods for software verification.



About you

Introduce yourself to the person sitting next to you © Why are you interested in doing this programme?

Where were you born?

What are your hobbies?



Four Master of Computer Science Programs

- Master of Computer Science (#24 units or #16 units)
- Graduate Certificate (#8 units)
- Graduate Diploma (#16 units)
- Master of Computer Science (Management) (#32 units)



Master of Computer Science

- Designed for applicants with a bachelor's degree in computer science or information technology (or a related field)
- Upgrade, update or deepen your knowledge of rapidly changing technologies
- Build your ability to develop, analyze and communicate new ideas
- Can be a pathway to advance your career
- May provide an entrance to research degree studies (Research Masters and PhD), e.g.
 - gives direct entry to Research Masters Degrees, and
 - with high enough results (5.65) to a PhD (if equivalent to honours class IIA)



#24 Master of Computer Science - requirements

#24 MCompSc (Program 5522)

Total: #24

Duration: 3 semesters full-time*

Note: Students with a 4-year degree, GPA at least 5.0 (out of 7.0), at least 16 of IT/CS courses, at least 2 courses must be at an advanced level in your final year of study, are granted for #16 MCompSc

^{*}you have to enroll in 4 courses every semester



MCompSc Flexible Core Courses (6 to 18 units)

COMP3820 (2 units) Digital Health Software Project

COMP4403 (2 units) Compilers and Interpreters

COMP4703 (2 units) Natural Language Processing

COMP7500 (2 units) Advanced Algorithms & Data Structures

COMP7703 (2 units) Machine Learning

COMS4105 (2 units) Communication Systems

COMS4507 (2 units) Advanced Topics in Security

COMS6200 (2 units) Computer Networks II

CSSE4011 (2 units) Advanced Embedded Systems

CSSE4630 (2 units) Principles of Program Analysis

CSSE6400 (2 units) Software Architecture

CSSE7610 (2 units) Concurrency: Theory and Practice

DECO6500 (2 units) Advanced Human-Computer Interaction

INFS7203 (2 units) Data Mining

INFS7205 (2 units) Advanced Techniques for High Dimensional Data

INFS7410 (2 units) Information Retrieval and Web Search

INFS7450 (2 units) Social Media Analytics



MCompSc Research Courses (6 to 10 units)

REIT6811 (2 units) Research Methods

Research methodology & research tools for computer science & engineering. Theoretical & practical material for starting, supporting & advancing research project work.

REIT7841 or REIT7842 (4 units) Computer Science Research Project

Substantial thesis project integrating research methods, planning and participation; seminar and thesis report on a field specific topic. These are year-long courses.

These are year-long courses:

- Students commencing in Sem. 1 enrol in REIT7841 for Sem. 1 (Part A) and Sem. 2 (Part B);
- Students commencing in Sem. 2 enrol in REIT7842 for Sem. 2 (Part A) and Sem. 1 (Part B).

or

REIT7881 or REIT7882 (8 units) Computer Science Research Project

Substantial thesis project integrating research methods, planning and participation; seminar and thesis report on a field specific topic. These are year-long courses.

- Students commencing in Sem. 1 enrol in REIT7881 for Sem. 1 (Part A) and Sem. 2 (Part B);
- Students commencing in Sem. 2 enrol in REIT7882 for Sem. 2 (Part A) and Sem. 1 (Part B).
- * Needs Head of School permission to enrol



Research and Development Methods and Practice (REIT7881)

Information valid for Semester 1, 2025

Course level

Postgraduate Coursework

Faculty

Engineering, Architecture & Information Technology

School

Elec Engineering, Comp Science

Units

8

Duration

Two Semesters

Attendance mode

In Person

Class hours

General contact hours 2 Hours/ Week

Restricted

Students on the Study Abroad program are not permitted to enrol. UQ students will need Head of School permission to enrol.

Assessment methods

Project thesis, demonstration/seminar & conference paper

Current course offerings

Course offerings Location Mode Course Profile

Semester 1, 2025 (24/02/2025 - 21/06/2025) St Lucia In Person PROFILE UNAVAILABLE

Please Note: Course profiles marked as not available may still be in development.

Course duration

This is a year long course. It commences in Semester 1, 2025 and completes in Semester 2, 2025.

Course description

Project or thesis on a topic relevant to the School's research profile and the student's field of engineering study that allows students to apply their knowledge and skills to practical applications. Students commencing in Semester 1 enrol in REIT7881 for Semester 1 and Semester 2. Students commencing in Semester 2 enrol in REIT7882 for Semester 2 and the following Semester 1.



Course approvals for research projects

Research Projects except for **REIT7841** and **REIT7842**, require 'Permission Head of School' and this will create enrolment error.

Enrolment will not be permitted until:

- a project is allocated, and
- the supervisor has agreed that the project is suitable for such enrolment.

Students who have obtained a written agreement from a supervisor, should forward this to the Coursework Studies team at studentenquiries@eecs.uq.edu.au to assist with their enrolment permission.



Computer Science Research Project Information

Most projects requires both **reading** (research papers), and consequent **design** and **implementation**: it will not be a programming exercise which routinely applies undergraduate material.

Thesis coursework information:

https://eecs.uq.edu.au/current-students/thesis-coursework-information

Project topics and their academic supervisors:

https://student.eait.uq.edu.au/projects/



MCompSc Advanced Undergraduate Elective Courses (0 to 6 units)

COMP3301 (2 units) Operating Systems Architecture

COMP3506 (2 units) Algorithms & Data Structures

COMP3702 (2 units) Artificial Intelligence

COMS3200 (2 units) Computer Networks I

CSSE3010 (2 units) Embedded Systems Design & Interfacing

CSSE3012 (2 units) The Software Process

CYBR3000 (2 units) Information Security

DECO3500 (2 units) Social & Mobile Computing

INFS3200 (2 units) Advanced Database Systems

INFS3208 (2 units) Cloud Computing



MCompSc Postgraduate Elective Courses (0 to 8 units)

BISM7255 (2 units) Business Information Systems Analysis and Design

COMP7710 (2 units) Introduction to Software Innovation

COSC7502 (2 units) High-Performance Computing

CSSE7100 (2 units) Reasoning about Programs

INFS7202 (2 units) Web Information Systems



#24 Master of Computer Science (3 semesters)

A student is required to obtain #24 from the MCompSc list, including—

6 to 18 units from MCompSc Flexible Core Courses, and

6 to 10 units from MCompSc Research Courses, and

0 to 6 units from MCompSc Advanced Undergraduate Elective Courses, and

0 to 8 units from MCompSc Postgraduate Elective Courses

Selected courses must include at least 12 units at level 6 or higher.

Selected courses must include at least 8 units at level 7 or higher.

For study plan see: https://eecs.uq.edu.au/current-students/academic-advice/master-computer-science



#16 Master of Computer Science (2 semesters)

A student is required to obtain #16 from the MCompSc List, including—

2 to 10 units from MCompSc Flexible Core Courses, and

6 to 10 units from MCompSc Research Courses, and

0 to 4 units from MCompSc Postgraduate Elective Courses

8 units from Approved recognised prior study and/or work experience

Selected courses must include at least 12 units at level 6 or higher.

Selected courses must include at least 8 units at level 7 or higher.

For study plan see: https://eecs.uq.edu.au/current-students/academic-advice/master-computer-science



#8 Graduate Certificate (1 semester)

Complete 8 units comprising:

0 to 8 units from GCCompSc Flexible Core Courses, and

0 to 2 units from GCCompSc Advanced Undergraduate Elective Courses, and

0 to 8 units from GCCompSc Postgraduate Elective Courses

Selected courses must include at least 2 units at level 6 or higher.



#16 Graduate Diploma (2 semesters)

- Complete 16 units comprising:
- 8 to 12 units from GDCompSc Flexible Core Courses, and
- 0 to 4 units from GDCompSc Advanced Undergraduate Elective Courses, and
- 0 to 8 units from GDCompSc Postgraduate Elective Courses
- Selected courses must include at least 8 units at level 6 or higher.



Further Studies for Graduate Diploma/Certificate

Graduates of the Graduate Diploma/Certificate in Computer Science can progress into the following programs:

Master of Computer Science

Master of Computer Science (Management)

Because courses in the graduate diploma/certificate are taken from the master's course list, you can transfer study credits to the higher-level program.

If your articulation offer into another program is contingent on your completion of a Graduate Certificate/Graduate Diploma, be careful to complete the Graduate Certificate/Graduate Disploma requirements first!



#32 Master of Computer Science(Management)

MCompSc(Mgmt) is an extension of MCompSc by one semester to accommodate four business/management courses:

• 8 units from MCompSc(Mgmt) Management Elective Courses

This program is designed to meet industry demand for professionals with combination of skills in CS/IT and business/management.

If you need academic advice on these business/management courses, please contact UQ Business School (<u>info@business.uq.edu.au</u>)

For study plan see: https://eecs.uq.edu.au/current-students/academic-advice/master-computer-science



Follow your program requirements:

#24 or #16 Master of Computer Science:

https://my.uq.edu.au/programs-courses/requirements/program/5522

#8 Graduate Certificate of Computer Science:

https://my.uq.edu.au/programs-courses/requirements/program/5519

#16 Graduate Diploma of Computer Science:

https://my.uq.edu.au/programs-courses/requirements/program/5520

#32 Master of Computer Science (Management):

• https://my.uq.edu.au/programs-courses/requirements/program/5523



Course selection

Each course has a Course Profile that describes the course (its prerequisites, textbook, course content, assessment, etc).

If you need a face-to-face academic consultancy, please go to Coursework Studies Office (78-425, studentenquiries@eecs.uq.edu.au) to book an appointment with the academic advisor/the program director.

Consult the School of Electrical Engineering and Computer Science Coursework Studies Office (78-425, studentenquiries@eecs.uq.edu.au) if you have problems with enrolment.



Course approvals

Elective courses (courses not included in your program requirements) require approval by Associate Dean (Academic) of EAIT (equirements).

You will need to make an appointment with an academic advisor to seek a recommendation and then use that recommendation to apply to the EAIT Faculty for approval.



Seeking Academic Advice

What an academic advisor can do:

- To provide advice and recommendation to you on academic things such as course selection
- To give suggestion and recommendation to head of school and dean of faculty on your request/application

What an academic advisor cannot do:

To approve your request or make the final decision



Academic Integrity and Plagiarism

The University takes academic integrity very seriously.

You must:

- Not use the work of others without appropriate referencing and citation
- Not share code for individual assignments
- Know when group work is appropriate and not appropriate
- Not let others use your work or answers
- Ask your lecturer (<u>before</u> the due date) if you're not sure
- Very effective Electronic detection of plagiarism is used; and severe penalties apply!

Compulsory Information and Online Learning Module: https://tinyurl.com/uqintegritymodule

University Conduct Guidelines: https://tinyurl.com/uqmisconduct School Conduct Guidelines: https://tinyurl.com/eecsmisconduct







Icebreaker - Conversation Starters

Skip the awkward small talk! Scan the QR code to access some fun and interesting questions to ask each other and get the conversation started.



