



COMP4092

Software Engineering Research Thesis A

Session 2, In person-scheduled-weekday, North Ryde 2026

School of Computing

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General Information

Unit convenor and teaching staff Unit convenor and lecturer Kate Stefanov kate.stefanov@mq.edu.au By appointment
Credit points 10
Prerequisites COMP3000 and COMP3010 and COMP3100
Corequisites COMP4050 or COMP4060
Co-badged status
Unit description In this unit, you will begin your final-year thesis project in the Software Engineering specialisation under the direction of an academic supervisor. You will formulate your problem statement, conduct a literature review, and undertake project planning and design, establishing the foundation for your thesis that continues in Thesis B. Learning in this unit enhances student understanding of global challenges identified by the United Nations Sustainable Development Goals (UNSDGs) Industry, Innovation and Infrastructure

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at <https://www.mq.edu.au/study/calendar-of-dates>

Learning Outcomes

On successful completion of this unit, you will be able to:

ULO1: Analyse a complex software engineering problem and define discipline specific research questions that require the development of new knowledge or research into cutting-edge techniques.

ULO2: Plan a major software engineering research project, including the design of necessary processes, information management, records keeping, project management,

and communications.

ULO3: Demonstrate an advanced knowledge of contextual factors, research direction, and foundational concepts in software engineering.

ULO4: Apply core software engineering principles, practices, and research methods to a research or industry challenge.

ULO5: Demonstrate intellectual independence, and an in-depth understanding of a specialist topic within software engineering through verbal and written communication.

General Assessment Information

Grading and Passing Requirement for the Unit

In order to pass this unit a student must obtain a mark of 50 or more for the unit (i.e. obtain a passing grade P/ CR/ D/ HD).

For further details about grading, please refer below in the policies and procedures section.

Late Submissions and Re-submissions

All assessments must be submitted by 23:59pm (Sydney Time) on their due date. Should the activities be missed due to illness or misadventure, students may apply for Special Consideration, as detailed below.

- **Project Report:** Late submissions are not allowed unless there is an approved special consideration request. Resubmissions are not allowed.
- **Oral Defence:** Late submissions are not allowed unless there is an approved special consideration request showing that the student cannot make the presentation on the presentation date. Resubmissions are not allowed.
- **Project Management and Progress Portfolio:** Late submissions are not allowed unless there is an approved special consideration request. Resubmissions are not allowed.

Project Implementation

If your project requires on-campus lab attendance and you are not able to get back to campus on time, please contact with the unit convenor and your supervisor as soon as possible.

Short Extensions

Short extensions are NOT allowed.

Release Dates

Results for all assessment tasks will be released after the examination period, in accordance with the University's official examination results publication schedule.

Assessment Tasks

Name	Weighting	Hurdle	Due	Groupwork/Individual	Short Extension	AI Approach
<u>Project Report</u>	40%	No	08/ 11/ 2026	Individual	No	Open
<u>Oral Defence</u>	40%	No	Week 14-16	Individual	No	Observed
<u>Project Management and Progress Portfolio</u>	20%	No	08/ 11/ 2026	Individual	No	Observed

Project Report

Assessment Type ¹: Written Submission

Indicative Time on Task ²: 45 hours

Due: **08/11/2026**

Weighting: **40%**

Groupwork/Individual: Individual

Short extension ³: No

AI Approach: Open

Reports are the standard way engineers and researchers communicate project outcomes to technical and academic audiences. You will prepare a written report covering your aims, research question, literature review, methodology, design, progress and key achievements. This develops your technical writing, critical synthesis and research planning skills.

On successful completion you will be able to:

- Analyse a complex software engineering problem and define discipline specific research questions that require the development of new knowledge or research into cutting-edge techniques.
- Plan a major software engineering research project, including the design of necessary processes, information management, records keeping, project management, and communications.
- Demonstrate an advanced knowledge of contextual factors, research direction, and foundational concepts in software engineering.
- Apply core software engineering principles, practices, and research methods to a research or industry challenge.
- Demonstrate intellectual independence, and an in-depth understanding of a specialist topic within software engineering through verbal and written communication.

Oral Defence

Assessment Type ¹: Presentation task

Indicative Time on Task ²: 15 hours

Due: **Week 14-16**

Weighting: **40%**

Groupwork/Individual: Individual

Short extension ³: No

AI Approach: Observed

Presenting project work and responding to questions from expert audiences is a routine part of professional engineering practice. You will present your project and respond to examiner questions during the exam period. This develops your communication skills and your ability to defend your research decisions under questioning.

On successful completion you will be able to:

- Analyse a complex software engineering problem and define discipline specific research questions that require the development of new knowledge or research into cutting-edge techniques.
- Plan a major software engineering research project, including the design of necessary processes, information management, records keeping, project management, and communications.
- Demonstrate an advanced knowledge of contextual factors, research direction, and foundational concepts in software engineering.
- Apply core software engineering principles, practices, and research methods to a research or industry challenge.
- Demonstrate intellectual independence, and an in-depth understanding of a specialist topic within software engineering through verbal and written communication.

Project Management and Progress Portfolio

Assessment Type ¹: Portfolio

Indicative Time on Task ²: 15 hours

Due: **08/11/2026**

Weighting: **20%**

Groupwork/Individual: Individual

Short extension ³: No

AI Approach: Observed

Regular supervisor meetings and a project logbook reflect the self-directed practice expected of professional engineers. You will meet with your supervisor throughout the project and maintain a logbook recording your activities, decisions and progress. This builds your self-management, initiative and capacity to work independently on a substantial project.

On successful completion you will be able to:

- Analyse a complex software engineering problem and define discipline specific research questions that require the development of new knowledge or research into cutting-edge techniques.
- Plan a major software engineering research project, including the design of necessary processes, information management, records keeping, project management, and communications.
- Demonstrate an advanced knowledge of contextual factors, research direction, and foundational concepts in software engineering.
- Apply core software engineering principles, practices, and research methods to a research or industry challenge.
- Demonstrate intellectual independence, and an in-depth understanding of a specialist topic within software engineering through verbal and written communication.

¹ If you need help with your assignment, please contact:

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- [Academic Success](#) for academic skills support.

² Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation.

³ An automatic short extension is available for some assessments. Apply through the [Service Connect Portal](#).

Delivery and Resources

Unit Delivery

This is a project-based unit. Development of knowledge and skills will be guided by both weekly sessions with the unit convenor and also regular interaction with your supervisor.

The one-hour sessions (lectures / workshops / discussions) with the unit convenor start in Week 1.

You are strongly advised to meet with your supervisor on a weekly basis, once the project commences. Weekly meetings should aim to seek feedback and steer the project, and would normally last at least 15-30 minutes or more. Meetings can be conducted using telephone or video-conference. Outcomes of a minimum of five meetings must be documented using the meeting log sheet provided on iLearn to meet this hurdle assessment task.

Logbook

This unit requires a logbook. The students should maintain an individual logbook which should contain a dated log of day-to-day activities undertaken in relation to the project.

Technology Used and Required

The students are required to discuss with their supervisor about the software/hardware resources required for analysis, simulation, testing and experiments related to their project. In addition, word processing software (MS Word, Latex etc.) will be required to produce the preliminary thesis and MS PowerPoint or equivalent software will be required for presentation slides.

Unit Webpage

Access from the online iLearn System at <http://ilearn.mq.edu.au>

Required and Recommended Texts/Materials

There is not set textbook for this unit. The students are required to discuss with their supervisor regarding required/recommended reading materials, as suited to individual project needs.

Communication

We will communicate with you via your university email or through announcements on iLearn. Queries to the convenor can either be placed before/after the weekly meeting, on the iLearn discussion board or sent via email to the convenor's address from your university email address.

Unit Schedule

One hour weekly meeting with the unit convenor and a weekly meeting with your supervisor.

Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central](https://policies.mq.edu.au) (<https://policies.mq.edu.au>). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- [Academic Appeals Policy](#)
- [Academic Integrity Policy](#)
- [Academic Progression Policy](#)
- [Assessment Policy](#)
- [Fitness to Practice Procedure](#)
- [Assessment Procedure](#)
- [Complaints Resolution Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#)

Students seeking more policy resources can visit [Student Policies](https://students.mq.edu.au/support/study/policies) (<https://students.mq.edu.au/support/study/policies>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit [Policy Central](https://policies.mq.edu.au) (<https://policies.mq.edu.au>)

[du.au](#)) and use the [search tool](#).

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: <https://students.mq.edu.au/admin/other-resources/student-conduct>

Results

Results published on platform other than [eStudent](#), (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in [eStudent](#). For more information visit connect.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe [academic integrity](#) – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free [online writing and maths support](#), [academic skills development](#) and [wellbeing consultations](#).

Student Support

Macquarie University provides a range of support services for students. For details, visit <http://students.mq.edu.au/support/>

Academic Success

[Academic Success](#) provides resources to develop your English language proficiency, academic writing, and communication skills.

- [Ask a Study Coach](#)
- [Access StudyWISE](#)
- [Upload an assignment to Studiosity](#)
- [Complete the Academic Integrity Module](#)

The Library provides online and face to face support to help you find and use relevant information resources.

- [Subject and Research Guides](#)
- [Ask a Librarian](#)

Student Services and Support

Macquarie University offers a range of [Student Support Services](#) including:

- [IT Support](#)
- [Accessibility and disability support](#) with study

- Mental health [support](#)
- [Safety support](#) to respond to bullying, harassment, sexual harassment and sexual assault
- [Social support including information about finances, tenancy and legal issues](#)
- [Student Advocacy](#) provides independent advice on MQ policies, procedures, and processes

Student Enquiries

Got a question? Ask us via the [Service Connect Portal](#), or contact [Service Connect](#).

IT Help

For help with University computer systems and technology, visit <https://students.mq.edu.au/support/technology/service-desk>.

When using the University's IT, you must adhere to the [Acceptable Use of IT Resources Policy](#). The policy applies to all who connect to the MQ network including students.

Unit information based on version 2026.04 of the [Handbook](#)