



FOSE3000

Making Science Work for You and Society: Capstone

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

Science and Engineering Faculty level units

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Disclaimer

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General Information

Unit convenor and teaching staff

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Credit points

10

Prerequisites

Admission to BSc and 20cp at 3000 level

Corequisites

Co-badged status

Unit description

How do the skills and knowledge you have acquired fit you for the next step beyond your degree? What is the role of scientific thinking in the workplace and in solving society's problems? The core component of this unit is a cross-disciplinary project, in which you will collaborate with students from other majors in the Bachelor of Science. You will identify and practice employability and workplace skills, connecting your university experiences to career aspirations. By actively reflecting on prior learning and experiences, you will build and articulate a positive self-understanding, exploring opportunities and clarifying goals for the next stage of your career.

Learning in this unit enhances student understanding of global challenges identified by the United Nations Sustainable Development Goals ([UNSDGs](#)).

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:** Select and apply practical and/or theoretical techniques or tools from your discipline to conduct an investigation.
- ULO2:** Design and plan a professional cross-disciplinary investigation, using scientific thinking and creative strategies to devise and promote innovation.
- ULO3:** Explain the role and relevance of science in society, using examples from your and other scientific disciplines.
- ULO4:** Plan your next steps after graduation, through an appraisal of personal achievements and the current and projected work environment.
- ULO5:** Explain, with an employment and interview focus, how your study and achievements transfer to other contexts, orally and in writing.
- ULO6:** Work effectively, responsibly and safely, as an individual and as part of a team, applying knowledge of ethical principles and professional conduct.

General Assessment Information

Hurdle Assessments

There are no hurdle assessments in this unit.

Requirements to Pass the Unit

To pass the unit you must:

- Achieve a total mark greater than or equal to 50%

Assessment Criteria

Assessment at Macquarie University is standards-based, as outlined in the [Assessment Policy](#). This means that your work will be assessed against clear criteria, and these criteria will be made available when the assessment tasks are released to you on iLearn.

Submission of Assessments

All assignments must be submitted online through Turnitin unless otherwise indicated. Links for the submission of each assignment will be available on [iLearn](#). The due dates for all assessment tasks are not negotiable. If you have commitments that will significantly impact your study during the session then you must plan for this in advance as part of an effective individual study plan and you may need to contact the unit convenor for advice.

Marking of Assessments

Assignments will be marked through Turnitin (unless otherwise indicated) and feedback will be given via iLearn. **Do not** submit your assignments via email or in hard copy. Your grades will be returned using the Grades Report on iLearn.

We aim to return your assignments with feedback within two to three weeks of the date that you submit your assignment, and before your next assignment is due. We appreciate your patience and will advise you through iLearn when your marked assignments and feedback are available for viewing.

Late Submission Policy

- **5% penalty per day:** If you submit your assessment late, **5% of the total possible marks** will be deducted for each day (including weekends), up to 7 days.
 - *Example 1 (out of 100):* If you score 85/100 but submit 20 hours late, you will lose 5 marks and receive **80/100**
 - *Example 2 (out of 30):* If you score 27/30 but submit 1 day late, you will lose 1.5 marks and receive **25.5/30**.
- **After 7 days:** Submissions more than 7 days late will receive a **mark of 0**.
- **Extensions:**
 - **Automatic short extension:** Some assessments are eligible for automatic short extension. You can only apply for an automatic short extension before the due date.
 - **Special Consideration:** If you need more time due to serious issues and for any assessments that are not eligible for Short Extension, you must apply for Special Consideration.

Need help? Review the Special Consideration page [HERE](#)

Assessments where Late Submissions will be accepted

- Reflective project contribution log – **YES**, Standard Late Penalty applies
- Project Pitch – **NO**, Unless Special Consideration is Granted
- Project Plan – **YES**, Standard Late Penalty applies

Release of Assessments

Assessments will be released as follows:

- The Project Pitch will be introduced in class in Week 2 (3 August 2026). Each team must produce a video pitch, which is due by 11 October 2026
- Reflective blog posts will be introduced in Week 1 (27 July 2026) and assessed as a portfolio at the end of Week 13; the complete portfolio is due by 8 November 2026. You are expected to produce weekly blog posts from Week 1 to Week 13; your first milestone will be the Week 7 blog post, due by 7 September 2026.
- The Project Plan is the culmination of the full semester's work. It is a group activity you will work on every week from Week 1 onwards. The final plan is due at the end of Week 13 (8 November 2026).

Special Consideration

The [Special Consideration Policy](#) aims to support students who have been impacted by short-term circumstances or events that are serious, unavoidable and significantly disruptive, and which may affect their performance in assessment. If you experience circumstances or events that affect your ability to complete the assessments in this unit on time, please inform the convenor and submit a Special Consideration request through <https://connect.mq.edu.au>.

Assessment Tasks

Name	Weighting	Hurdle	Due	Groupwork/Individual	Short Extension	AI Approach
Project plan	40%	No	08/ 11/ 2026	Individual and Group	No	Observed
Reflective project development log	40%	No	08/ 11/ 2026	Individual	No	Open
Project Pitch	20%	No	11/ 10/ 2026	Individual and Group	No	Open

Project plan

Assessment Type ¹: Professional task

Indicative Time on Task ²: 30 hours

Due: **08/11/2026**

Weighting: **40%**

Groupwork/Individual: Individual and Group

Short extension ³: No

AI Approach: Observed

You will produce as a team a written proposal for your capstone project, presented as if to a prospective funder or investor. The report/plan will clearly outline the project's objectives, methodology, impact, and implementation plan. It will demonstrate cross-disciplinary thinking, integrating knowledge and approaches from relevant fields.

On successful completion you will be able to:

- Select and apply practical and/or theoretical techniques or tools from your discipline to conduct an investigation.
- Design and plan a professional cross-disciplinary investigation, using scientific thinking and creative strategies to devise and promote innovation.
- Explain the role and relevance of science in society, using examples from your and other scientific disciplines.
- Work effectively, responsibly and safely, as an individual and as part of a team, applying knowledge of ethical principles and professional conduct.

Reflective project development log

Assessment Type ¹: Portfolio

Indicative Time on Task ²: 17 hours

Due: **08/11/2026**

Weighting: **40%**

Groupwork/Individual: Individual

Short extension ³: No

AI Approach: Open

You will produce a weekly log of your personal contributions to your team's capstone project, developed throughout the unit. This will include one piece of formal reflective writing, where you reflect on the process of project development, connecting this to the knowledge and experience you have gained throughout your degree, and to your future career.

On successful completion you will be able to:

- Plan your next steps after graduation, through an appraisal of personal achievements and the current and projected work environment.

- Explain, with an employment and interview focus, how your study and achievements transfer to other contexts, orally and in writing.
- Work effectively, responsibly and safely, as an individual and as part of a team, applying knowledge of ethical principles and professional conduct.

Project Pitch

Assessment Type ¹: Presentation task

Indicative Time on Task ²: 30 hours

Due: **11/10/2026**

Weighting: **20%**

Groupwork/Individual: Individual and Group

Short extension ³: No

AI Approach: Open

You will work in teams to prepare and deliver a video presentation that pitches your project to a target audience (e.g., an internal department, executive manager, angel investor, government body, or community group). Your team will submit a formal Statement of Contribution detailing team members' contributions to the development and creation of the video pitch.

On successful completion you will be able to:

- Select and apply practical and/or theoretical techniques or tools from your discipline to conduct an investigation.
- Design and plan a professional cross-disciplinary investigation, using scientific thinking and creative strategies to devise and promote innovation.
- Explain the role and relevance of science in society, using examples from your and other scientific disciplines.
- Work effectively, responsibly and safely, as an individual and as part of a team, applying knowledge of ethical principles and professional conduct.

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 communications

Unit staff will communicate with you via your university email or through announcements on iLearn. Queries to convenors should be placed on the iLearn General Forum.

For matters of a more personal nature, and that do not concern other students (i.e. requests for extensions, etc.), you should contact the Unit Convener, Joanne Dawson, by email. Contact details are provided at the start of this document.

Classes

Weekly workshops (beginning in Week 1): There is one three-hour interactive workshop each week.

The class timetable can be accessed via Class Finder in [eStudent](#). A detailed class schedule with assessment due dates will be made available to all enrolled students through [iLearn](#).

Students are expected to attend all of the weekly 3 hour workshops. Students enrolled in on-campus offerings will attend workshops **in-person on campus**. Those enrolled in online offerings will **attend in a virtual classroom hosted online**. Workshops are very interactive and hands-on, exploring the theme for each week, and providing structured activities to guide you in the development of your core project. Make sure that you have completed any weekly pre-workshop online materials **before** attending the workshop, as they are designed to provide you with a framework and are an essential and important component of the unit. The workshops are structured as a combination of delivered material and small group discussions and tasks. The workshops will also provide time and support for working on the main project in teams.

Students complete approximately 36 hours of class work (in scheduled workshops) and are expected to undertake 114 hours of personal study, project development work and reflection to complete the unit and present the assessment tasks. Students are responsible for managing their time for learning and the tasks for group work.

Technology Used and Required

You will need to **bring a laptop computer or tablet to class each week**. If this is problematic for you, please contact the unit convenor who will help provide a solution. You will also need to have access to a computer to use the university systems (e.g. iLearn, library) and complete the assessment tasks.

For those enrolled in the online version of the unit, online weekly workshops will be **hosted in a virtual classroom space online**. A standard internet browser, and working microphone (essential) and camera (strongly recommended) should be sufficient to permit successful participation in the workshops.

We will make use of groupwork management tools such as Google Drive, Google Docs and Google Sheets.

Unit Schedule

Week	Workshop Topic
1	Unit Introduction; United Nations Sustainable Development Goals; Idea Seeding and Team Formation
2	Refining and Pitching Ideas; Team Formation and Building
3	Evaluating Ideas; Mock Pitch Presentations; Peer-grading pitches
4	Evaluating Ideas; Ethics and Values; Cross-Cultural Communication; Effective Team Work
5	Strategies for Working in Cross-Disciplinary Teams; Assembling the Expertise You Need; Cross-Disciplinary Consultation with Bachelor of Commerce Majors; Project Development Time
6	Customer Discovery Workshop; Project Development Time
7	Articulating Impact and Benefit; Introduction to Budgeting; Project Development Time
8	Risk Identification and Mitigation; Project Planning and Timelines; Project Development Time
9	Persuasive Communication and Data Visualisation; Intellectual Property Workshop, Project Development Time
10	Final Project Pitches; Project Development Time
11	Proposal Writing Tips; Project Development and Writing Time
12	Career Development Pathways; CV and Resume Writing
13	Finalising Project Plans

Note: The schedule is flexible and subject to change.

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>) 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.

Changes from Previous Offering

The FOSE3000 facilitating team now comprises Richard de Grijs (Convenor; MAPS), with Gayandhi De Silva (MAPS), Trsitian Guillemin (NatSci), Darrell Kemp (NatSci) and Angel Rafael Lopez Sanchez (MAPS) as co-lecturers/facilitators.

Unit information based on version 2026.03 of the [Handbook](#)