



# ENGG4001

## Professional Practice

Session 1, Special circumstances 2021

*School of Engineering*

### Contents

---

<a href="#"><u>General Information</u></a>	2
<a href="#"><u>Learning Outcomes</u></a>	2
<a href="#"><u>General Assessment Information</u></a>	3
<a href="#"><u>Assessment Tasks</u></a>	3
<a href="#"><u>Delivery and Resources</u></a>	6
<a href="#"><u>Unit Schedule</u></a>	6
<a href="#"><u>Policies and Procedures</u></a>	6
<a href="#"><u>Changes from Previous Offering</u></a>	8
<a href="#"><u>Changes since First Published</u></a>	8

---

#### **Disclaimer**

Macquarie University has taken all reasonable measures to ensure the information in this publication is accurate and up-to-date. However, the information may change or become out-dated as a result of change in University policies, procedures or rules. The University reserves the right to make changes to any information in this publication without notice. Users of this publication are advised to check the website version of this publication [or the relevant faculty or department] before acting on any information in this publication.

#### **Notice**

As part of [Phase 3 of our return to campus plan](#), most units will now run tutorials, seminars and other small group activities on campus, and most will keep an online version available to those students unable to return or those who choose to continue their studies online.

To check the availability of face-to-face activities for your unit, please go to [timetable viewer](#). To check detailed information on unit assessments visit your unit's iLearn space or consult your unit convenor.

## General Information

Unit convenor and teaching staff

Lecturer

Rex Di Bona

[rex.dibona@mq.edu.au](mailto:rex.dibona@mq.edu.au)

Contact via via email

50 Waterloo Road, Level 1

Friday 3pm-5pm

Credit points

10

Prerequisites

ENGG3000 or ENGG300

Corequisites

Co-badged status

Unit description

In this professional practice capstone unit students will work as teams of consulting engineers to provide an engineering solution to a real societal need or problem, and which addresses a Sustainable Development Goal (SDG). The teams may be multidisciplinary, as required by the nature of the project, and will source a valuable exposure to an in-depth understanding of the problem, the relevant industry, and the socio-technical and other contexts in which the need or problem arose, and the engineered system or solution required. The teams will be expected to organise, plan, and perform all other tasks associated with good engineering practice, including discussion and reflection around the engineering problem and the engineering process. Individual and collective technical and professional competencies will be demonstrated through the production of a substantial report and presentation for consideration. An appreciation of the various contexts and factors impacting upon engineering practice will be developed.

## Important Academic Dates

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

## Learning Outcomes

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

**ULO2:** Effectively and professionally communicate engineering concepts in multiple

modes to a range of audiences.

**ULO1:** Work productively in teams of professional engineers.

**ULO4:** Examine and reflect on the socio-technical and other contexts in which engineering is practiced.

**ULO3:** Develop and deliver a professional engineering report, detailing the problem to be solved, the proposed problem solution, a critique of the solution and the reasons why the solution was chosen or recommended.

**ULO5:** Exercise professional and self reflective practice.

## General Assessment Information

### Grading and passing requirement for 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).

Grades for this unit will be issued as a letter grade (P/CR/D/HD) only, as per Section 2.3 of Schedule 1 of the Assessment Policy.

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

This capstone unit has a "**Fitness to Practice**" hurdle requirement that students must meet in order to pass this unit. Any students who do not meet the professionalism required of the Unit will first be warned formally via email and an in-person meeting. For further details please refer to the policies and procedures section, specifically the Fitness to Practice Procedure.

There is a hurdle requirement for the final report. If this report fails the hurdle requirement a second attempt will be provided during the examination period for re-submission of the final report. The maximum grade possible for the second attempt is the hurdle threshold grade.

## Assessment Tasks

Name	Weighting	Hurdle	Due
<a href="#"><u>In session quizzes</u></a>	30%	No	Weeks 2, 8, 10 and 12
<a href="#"><u>Engineering presentation</u></a>	15%	No	Week 13
<a href="#"><u>Progress Report</u></a>	15%	No	Week 6
<a href="#"><u>Final report</u></a>	30%	Yes	Week 13
<a href="#"><u>Portfolio</u></a>	10%	No	Week 13

## In session quizzes

Assessment Type <sup>1</sup>: Quiz/Test

Indicative Time on Task <sup>2</sup>: 15 hours

Due: **Weeks 2, 8, 10 and 12**

Weighting: **30%**

A series of small quizzes to reflect on the foundation scaffolding learning materials supporting the design of a solution

On successful completion you will be able to:

- Examine and reflect on the socio-technical and other contexts in which engineering is practiced.
- Exercise professional and self reflective practice.

## Engineering presentation

Assessment Type <sup>1</sup>: Presentation

Indicative Time on Task <sup>2</sup>: 15 hours

Due: **Week 13**

Weighting: **15%**

Each group will provide a presentation of their engineering solution

On successful completion you will be able to:

- Effectively and professionally communicate engineering concepts in multiple modes to a range of audiences.
- Work productively in teams of professional engineers.
- Examine and reflect on the socio-technical and other contexts in which engineering is practiced.
- Develop and deliver a professional engineering report, detailing the problem to be solved, the proposed problem solution, a critique of the solution and the reasons why the solution was chosen or recommended.

## Progress Report

Assessment Type <sup>1</sup>: Report

Indicative Time on Task <sup>2</sup>: 15 hours

Due: **Week 6**

Weighting: **15%**

A preliminary progress report outlining preliminary findings, a plan for the remaining work including individual roles within the team

On successful completion you will be able to:

- Effectively and professionally communicate engineering concepts in multiple modes to a range of audiences.
- Work productively in teams of professional engineers.
- Examine and reflect on the socio-technical and other contexts in which engineering is practiced.

## Final report

Assessment Type <sup>1</sup>: Report

Indicative Time on Task <sup>2</sup>: 30 hours

Due: **Week 13**

Weighting: **30%**

**This is a hurdle assessment task (see [assessment policy](#) for more information on hurdle assessment tasks)**

Groups will produce a professional engineering report on the engineering solution to the chosen problem

On successful completion you will be able to:

- Effectively and professionally communicate engineering concepts in multiple modes to a range of audiences.
- Work productively in teams of professional engineers.
- Examine and reflect on the socio-technical and other contexts in which engineering is practiced.
- Develop and deliver a professional engineering report, detailing the problem to be solved, the proposed problem solution, a critique of the solution and the reasons why the solution was chosen or recommended.

## Portfolio

Assessment Type <sup>1</sup>: Portfolio

Indicative Time on Task <sup>2</sup>: 12 hours

Due: **Week 13**

Weighting: **10%**

Students will contribute regularly to an individual portfolio, recording a summary of professional practice engagement activities. (Note: the portfolio should be updated regularly, as appropriate depending on the variety of tasks).

On successful completion you will be able to:

- Exercise professional and self reflective practice.

<sup>1</sup> 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
- the [Learning Skills Unit](#) for academic skills support.

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

## Delivery and Resources

This unit will require you to work in an engineering group solving a real world problem. For 2021 we will be working with Ryde Council on problems concerning sustainability that occur in an urban environment.

## Unit Schedule

Refer to ilearn for details.

## Policies and Procedures

Macquarie University policies and procedures are accessible from [Policy Central](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central) (<https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central>). 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](#)
- [Grade Appeal Policy](#)
- [Complaint Management Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#) (**Note:** *The Special Consideration Policy is effective from 4 December 2017 and replaces the Disruption to Studies Policy.*)

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

If you would like to see all the policies relevant to Learning and Teaching visit [Policy Central](https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central) (<https://staff.mq.edu.au/work/strategy-planning-and-governance/university-policies-and-procedures/policy-central>).

## 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 [ask.mq.edu.au](http://ask.mq.edu.au) or if you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## Student Support

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

## Learning Skills

Learning Skills ([mq.edu.au/learningskills](http://mq.edu.au/learningskills)) provides academic writing resources and study strategies to help you improve your marks and take control of your study.

- [Getting help with your assignment](#)
- [Workshops](#)
- [StudyWise](#)
- [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 Enquiry Service

For all student enquiries, visit Student Connect at [ask.mq.edu.au](http://ask.mq.edu.au)

If you are a Global MBA student contact [globalmba.support@mq.edu.au](mailto:globalmba.support@mq.edu.au)

## Equity Support

Students with a disability are encouraged to contact the [Disability Service](#) who can provide appropriate help with any issues that arise during their studies.

## IT Help

For help with University computer systems and technology, visit [http://www.mq.edu.au/about\\_us/offices\\_and\\_units/information\\_technology/help/](http://www.mq.edu.au/about_us/offices_and_units/information_technology/help/).

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

In this offering we will be working with the City of Ryde Council on issues in our local area.

## Changes since First Published

Date	Description
18/02/ 2021	The submission date for the scoping document has been moved to week 6 in line with mid session breaks.