



# ENGG1000

## Introduction to Engineering

Session 2, Special circumstances 2021

*School of Engineering*

### Contents

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<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

#### **Disclaimer**

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#### **Session 2 Learning and Teaching Update**

The decision has been made to conduct study online for the remainder of Session 2 for all units WITHOUT mandatory on-campus learning activities. Exams for Session 2 will also be online where possible to do so.

This is due to the extension of the lockdown orders and to provide certainty around arrangements for the remainder of Session 2. We hope to return to campus beyond Session 2 as soon as it is safe and appropriate to do so.

Some classes/teaching activities cannot be moved online and must be taught on campus. You should already know if you are in one of these classes/teaching activities and your unit convenor will provide you with more information via iLearn. If you want to confirm, see the list of [units with mandatory on-campus classes/teaching activities](#).

Visit the [MQ COVID-19 information page](#) for more detail.

## General Information

Unit convenor and teaching staff

Convenor

Nicholas Tse

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Contact via Appointment via Email

50 Waterloo Road

Appointment via Email

Credit points

10

Prerequisites

Corequisites

Co-badged status

Unit description

The 1st SPINE unit aimed to develop professional, transferable and employability skills. The unit has two objectives; 1) to develop the required self-management skills to be successful in the field of engineering. this includes time management skills, professional behaviour, empathy and metacognitive skills. 2) to develop related and transferable hands-on prototyping skills through a series of workshops. In the process, students will be able to contextualise their learning and develop basic fundamental prototyping skills required for them to be involved in a team-based project by the subsequent SPINE unit.

The SPINE units are series of scaffolded units across the engineering curriculum that aims to develop self-agency and self-efficacy that will help you transition into University study.

## 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:** Demonstrate practical skills in prototyping engineering designs.

**ULO2:** Follow safe working procedures when working with others.

**ULO3:** Apply strategies and tools to organise and conduct knowledge discovery

independently.

**ULO4:** Work and interact in accordance to the code of ethics and guidelines of engineering accreditation organisations.

**ULO5:** Articulate independent thinking and effectively communicate ideas and concepts.

## General Assessment Information

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).

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

### Hurdle Requirements

You must attend and participate in at least 8 of the 10 hands-on skills development workshop classes AND a majority of the online quizzes to pass this unit. This is a hurdle requirement.

### Prototyping Skill Development

There are multiple options of the skills development activities, however once assigned, the student must remain with that activity and should not be changed to another midway through the 5-week block. A list of competencies checklist will be marked off either from ongoing weekly activities or via the submitted 'proof of work'. These submittable are due as per the skills activities and may slightly vary between each skills development activity. All details will be listed on iLearn.

## Assessment Tasks

Name	Weighting	Hurdle	Due
<a href="#"><u>Prototyping skill development 1</u></a>	20%	No	Week 7
<a href="#"><u>Prototyping skill development 2</u></a>	20%	No	Week 13
<a href="#"><u>Weekly Quiz</u></a>	30%	No	refer to iLearn
<a href="#"><u>Professional portfolio on professional development</u></a>	20%	No	Week 13
<a href="#"><u>Participation of scheduled activities</u></a>	10%	Yes	Week 13

## Prototyping skill development 1

Assessment Type <sup>1</sup>: Design Implementation

Indicative Time on Task <sup>2</sup>: 5 hours

Due: **Week 7**

Weighting: **20%**

Developing the required hands-on competency relating to a chosen engineering field. The hands-on skill development will be translatable across other engineering domains. The skills will be chosen based on a preference selection during week 1. The availability of the skills will be dependent on whether students choose to engage in face-to-face mode or via online medium. Some skills are only available in face-to-face mode.

Example of cross-disciplinary hands-on skills: Technical drawing skill is an underpinning skill in both mechanical and civil engineering design communication.

On successful completion you will be able to:

- Demonstrate practical skills in prototyping engineering designs.
- Follow safe working procedures when working with others.
- Articulate independent thinking and effectively communicate ideas and concepts.

## Prototyping skill development 2

Assessment Type <sup>1</sup>: Design Implementation

Indicative Time on Task <sup>2</sup>: 5 hours

Due: **Week 13**

Weighting: **20%**

This is the 2nd skill development activity. Similar to the 1st skill development, it emphasizes on the hands prototyping skill required in any engineering field. The skill allocation will be assigned in week 1 as well.

The iterative exposure to new skills development is also to develop the required metacognitive skills in being successful with embarking with new knowledge fields. To put it simply is learning to learn.

On successful completion you will be able to:

- Demonstrate practical skills in prototyping engineering designs.
- Follow safe working procedures when working with others.

- Articulate independent thinking and effectively communicate ideas and concepts.

## Weekly Quiz

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

Indicative Time on Task <sup>2</sup>: 10 hours

Due: **refer to iLearn**

Weighting: **30%**

Weekly Quiz on audio podcasts and other professional development topics

On successful completion you will be able to:

- Follow safe working procedures when working with others.
- Apply strategies and tools to organise and conduct knowledge discovery independently.
- Articulate independent thinking and effectively communicate ideas and concepts.

## Professional portfolio on professional development

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

Indicative Time on Task <sup>2</sup>: 20 hours

Due: **Week 13**

Weighting: **20%**

Curate a professional portfolio that demonstrates the development of professional identity, self-improvement and learning artifacts.

On successful completion you will be able to:

- Work and interact in accordance to the code of ethics and guidelines of engineering accreditation organisations.
- Articulate independent thinking and effectively communicate ideas and concepts.

## Participation of scheduled activities

Assessment Type <sup>1</sup>: Participatory task

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

Due: **Week 13**

Weighting: **10%**

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

Engagement of scheduled activities which includes workshop attendance, mentorship program etc. More information will be provided on iLearn.

On successful completion you will be able to:

- Demonstrate practical skills in prototyping engineering designs.
- Work and interact in accordance to the code of ethics and guidelines of engineering accreditation organisations.

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<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 [Writing Centre](#) 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

Required resources can either be purchase or loan. Refer to iLearn for more information.

## Unit Schedule

Refer to iLearn and lecture notes for the unit schedule.

## 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](#)
- [Grade Appeal Policy](#)
- [Complaint Management Procedure for Students and Members of the Public](#)
- [Special Consideration Policy](#)

Students seeking more policy resources can visit [Student Policies \(https://students.mq.edu.au/su\)](https://students.mq.edu.au/su)

[port/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 [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 Services and 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.

## Student Enquiries

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)

## 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 response to previous LEU and other student feedbacks, some variations in the workshop activities and workload have been made.