



# ENGG2000

## Engineering Practice

Session 2, Special circumstance 2020

*School of Engineering*

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### Disclaimer

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### Notice

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

To check the availability of face-to-face and online 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

#### Convenor

Nicholas Tse

[nicholas.tse@mq.edu.au](mailto:nicholas.tse@mq.edu.au)

Contact via via email

50 Waterloo Road

Appointment via email or Tue/Wed

#### Convenor

Rex Di Bona

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

Contact via via email

50 Waterloo Road

Appointment via email or Tue/Wed

### Credit points

10

### Prerequisites

(COMP115 or COMP1000) and (ENGG100 or ENGG1050)

### Corequisites

CIVL2301 or (COMP247 or COMP2250) or (COMP225 or COMP2010) or (ELEC240 or ELEC2040) or (ELEC242 or ELEC2042) or (ELEC260 or MTRN2060) or (ELEC270 or ELEC2070) or (ELEC295 or ELCT2005) or (MECH203 or MECH2003)

### Co-badged status

### Unit description

The 4th SPINE unit aimed to develop professional, transferable and employability skills. The Unit consists of a series of online modules and integrated project-based learning activities.

Students will be exposed to real engineering projects and be apply and integrate their learnt technical skills in resolving a real-world inspired engineering problem. The working environment will facilitate the development of transferable skills such as effective team working skills and various form of technical communication skills.

Students are expected to apply systems thinking and design thinking in developing an innovative and practical engineering solution for the given problem. They will be expected to work alongside fellow senior students.

## 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:** Apply appropriate thinking strategies to achieve creative and innovative engineering solutions.

**ULO2:** Communicate technical information to a diverse range of audiences (including lay-people and experts in the field) using oral and written communication skills.

**ULO3:** Enumerate project parameters to effectively decompose complex engineering systems into subsystems such that they are objective and measurable.

**ULO4:** Work in a team and apply accountability strategies to ensure team objective is met.

**ULO5:** Apply rigour to the production of traceability documentation of the project.

**ULO6:** Demonstrate effective self-management ability and continual professional development.

## 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 to the policies and procedures section.

### Hurdle Requirements

There will be a "**Fitness to Practice (FTP)**" 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.

## Assessment Tasks

Name	Weighting	Hurdle	Due
<a href="#">A1 Online materials</a>	20%	No	Week 2,5,9 and 12
<a href="#">A2. Reflective writing</a>	10%	No	Week 7 and 13

Name	Weighting	Hurdle	Due
<u>A3. Portfolio</u>	10%	No	Week 13
<u>A5. Vertically Integrated Project</u>	60%	No	Refer to iLearn

## A1 Online materials

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

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

Due: **Week 2,5,9 and 12**

Weighting: **20%**

A range of topics delivered via podcasts, video recordings and other reading materials. Periodic online assessment around these topics. Material content will include but not limited to project management, team management, project organisation.

On successful completion you will be able to:

- Apply appropriate thinking strategies to achieve creative and innovative engineering solutions.
- Enumerate project parameters to effectively decompose complex engineering systems into subsystems such that they are objective and measurable.
- Work in a team and apply accountability strategies to ensure team objective is met.
- Apply rigour to the production of traceability documentation of the project.
- Demonstrate effective self-management ability and continual professional development.

## A2. Reflective writing

Assessment Type <sup>1</sup>: Reflective Writing

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

Due: **Week 7 and 13**

Weighting: **10%**

Reflective writing on transferable skills learnt. There will be two required submission at two-time points in the semester. Refer to iLearn for more information.

On successful completion you will be able to:

- Work in a team and apply accountability strategies to ensure team objective is met.

- Demonstrate effective self-management ability and continual professional development.

## A3. Portfolio

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

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

Due: **Week 13**

Weighting: **10%**

Continue professional development. A core part of the SPINE unit where students are to continually improve on their Portfolio development.

On successful completion you will be able to:

- Demonstrate effective self-management ability and continual professional development.

## A5. Vertically Integrated Project

Assessment Type <sup>1</sup>: Practice-based task

Indicative Time on Task <sup>2</sup>: 45 hours

Due: **Refer to iLearn**

Weighting: **60%**

Working collectively as a team of engineers (different disciplines and years), students are to design, conceive, document, implement and communicate a detailed plan to a multi-disciplinary real-world inspired engineering problem. The work will have multiple subcomponents and milestone and will required teams to peer evaluate. More information on iLearn.

On successful completion you will be able to:

- Apply appropriate thinking strategies to achieve creative and innovative engineering solutions.
- Communicate technical information to a diverse range of audiences (including lay-people and experts in the field) using oral and written communication skills.
- Enumerate project parameters to effectively decompose complex engineering systems into subsystems such that they are objective and measurable.
- Work in a team and apply accountability strategies to ensure team objective is met.
- Apply rigour to the production of traceability documentation of the project.

<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

Refer to iLearn for more details.

## 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://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/study/getting-started/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](mailto: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](mailto: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.