

ENGG8000

Professional Practice

Session 1, In person-scheduled-weekday, North Ryde 2024

School of Engineering

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General Information

Unit convenor and teaching staff

Unit Convenor

June Ho

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Contact via Via-email

School of Engineering, 50 Waterloo Road

By appointment via email

Unit Convenor

Viken Kortian

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Credit points

10

Prerequisites

Corequisites

Co-badged status

Unit description

In this professional practice unit students will work as teams of consulting engineers to provide an engineering solution to a real 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 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://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

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

ULO1: Demonstrate proficiency in teamwork as professional engineers and objectively evaluate the performance of the team and of your individual peers.

ULO2: Show excellent communication skills to communicate engineering concepts in multiple modes to a range of audiences.

ULO3: Deliver a professional engineering report with a high ethical standard, detailing the problem to be solved, the proposed problem solution, and critically evaluate the solution and the reasons why the solution was chosen or recommended.

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

ULO5: Exercise advanced professional and self reflective practice.

General Assessment Information

Requirements to Pass this Unit

To pass this unit you must: Achieve a total mark equal to or greater than 50%.

Assessments where Late Submissions will be accepted

Group assignment – No, unless Special Consideration is Granted

Individual assignment (Quiz) - No, unless Special Consideration is Granted

Special Consideration

The <u>Special Consideration Policy</u> 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 ask.mq.edu.au.

For any late submission of time-sensitive tasks, such as scheduled tests/exams, performance assessments/presentations, and/or scheduled practical assessments/labs, please apply for Spec ial Consideration.

Assessment Tasks

Name	Weighting	Hurdle	Due
In session quizzes	30%	No	Week 5, 11
Virtual learning experience	10%	No	Week 10

Name	Weighting	Hurdle	Due
Pitch session	30%	No	Week 6, 12
Project report	30%	No	Week 6, 12

In session quizzes

Assessment Type 1: Quiz/Test Indicative Time on Task 2: 18 hours

Due: Week 5, 11 Weighting: 30%

A series of small quizzes to reflect on the foundation scaffolding learning materials.

On successful completion you will be able to:

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

Virtual learning experience

Assessment Type 1: Reflective Writing Indicative Time on Task 2: 9 hours

Due: Week 10 Weighting: 10%

Students will provide a reflection report on a virtual learning experience.

On successful completion you will be able to:

• Exercise advanced professional and self reflective practice.

Pitch session

Assessment Type 1: Presentation Indicative Time on Task 2: 30 hours

Due: Week 6, 12 Weighting: 30%

Each team will give a pitch presentation on a technology/engineering innovation idea.

On successful completion you will be able to:

- Demonstrate proficiency in teamwork as professional engineers and objectively evaluate the performance of the team and of your individual peers.
- Show excellent communication skills to communicate engineering concepts in multiple modes to a range of audiences.
- Examine and reflect on the socio-technical and other contexts in which engineering is practiced.

Project report

Assessment Type 1: Report Indicative Time on Task 2: 30 hours

Due: Week 6, 12 Weighting: 30%

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

On successful completion you will be able to:

- Demonstrate proficiency in teamwork as professional engineers and objectively evaluate the performance of the team and of your individual peers.
- Show excellent communication skills to communicate engineering concepts in multiple modes to a range of audiences.
- Deliver a professional engineering report with a high ethical standard, detailing the
 problem to be solved, the proposed problem solution, and critically evaluate the solution
 and the reasons why the solution was chosen or recommended.
- Examine and reflect on the socio-technical and other contexts in which engineering is practiced.

- the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
- the Writing Centre for academic skills support.

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

² 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

Communication will be made via your university email or through announcements on iLearn.

Queries to convenors can either be placed on the iLearn discussion board or sent to unit convernor's email address.

Unit Schedule

Please refer to iLearn.

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (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 <u>Student Policies</u> (<u>https://students.mq.edu.au/support/study/policies</u>). 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.e 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 ask.mq.edu.au or if you are a Global MBA student contact globalmba.support@mq.edu.au

Academic Integrity

At Macquarie, we believe <u>academic integrity</u> – 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 <u>online writing and maths support</u>, 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/

The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader
- 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 AskMQ, or contact Service Connect.

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/ offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.

Changes from Previous Offering

Changing assessment types and weights.

Unit information based on version 2024.03 of the Handbook