



# ENEG20001 Australian Engineering Practice

## Term 2 - 2019

Profile information current as at 29/05/2025 08:19 pm

All details in this unit profile for ENEG20001 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student). The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

## General Information

### Overview

In this unit, you will be introduced to the roles of professional engineers in the Australian context. You will explore the Engineers Australia Stage 1 competencies and the place of the professional engineer in the engineering team. You will see that the engineer's role is to facilitate the integration of technical, business, social, cultural, environmental, economic and political issues that arise within engineering projects and programs. You will apply information literacy skills and information technology skills to engineering projects and present project outcomes. You will work in teams and develop team skills, develop communication skills appropriate for the professional environment, apply risk assessment and workplace health and safety assessment to engineering activities and explore the complex nature of engineering activities and the need to deal with uncertainty and conflicting information. You will prepare a portfolio to demonstrate development of a professional attitude, problem-solving skills, technical knowledge and productive work practices, and provide evidence of a professional capacity to communicate, work and learn productively, both individually and in teams.

### Details

Career Level: *Postgraduate*

Unit Level: *Level 8*

Credit Points: 12

Student Contribution Band: 2

Fraction of Full-Time Student Load: 0.25

### Pre-requisites or Co-requisites

There are no requisites for this unit.

Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the [Assessment Policy and Procedure \(Higher Education Coursework\)](#).

### Offerings For Term 2 - 2019

- Melbourne
- Online
- Perth
- Rockhampton

### Attendance Requirements

All on-campus students are expected to attend scheduled classes – in some units, these classes are identified as a mandatory (pass/fail) component and attendance is compulsory. International students, on a student visa, must maintain a full time study load and meet both attendance and academic progress requirements in each study period (satisfactory attendance for International students is defined as maintaining at least an 80% attendance record).

### Website

[This unit has a website, within the Moodle system, which is available two weeks before the start of term. It is important that you visit your Moodle site throughout the term. Please visit Moodle for more information.](#)

## Class and Assessment Overview

### Recommended Student Time Commitment

Each 12-credit Postgraduate unit at CQUniversity requires an overall time commitment of an average of 25 hours of study per week, making a total of 300 hours for the unit.

### Class Timetable

#### [Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

#### [Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

### Assessment Overview

#### 1. **Portfolio**

Weighting: 100%

### Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

## CQUniversity Policies

**All University policies are available on the [CQUniversity Policy site](#).**

You may wish to view these policies:

- Grades and Results Policy
- Assessment Policy and Procedure (Higher Education Coursework)
- Review of Grade Procedure
- Student Academic Integrity Policy and Procedure
- Monitoring Academic Progress (MAP) Policy and Procedure – Domestic Students
- Monitoring Academic Progress (MAP) Policy and Procedure – International Students
- Student Refund and Credit Balance Policy and Procedure
- Student Feedback – Compliments and Complaints Policy and Procedure
- Information and Communications Technology Acceptable Use Policy and Procedure

This list is not an exhaustive list of all University policies. The full list of University policies are available on the [CQUniversity Policy site](#).

## Previous Student Feedback

### Feedback, Recommendations and Responses

Every unit is reviewed for enhancement each year. At the most recent review, the following staff and student feedback items were identified and recommendations were made.

#### Feedback from Unit evaluation

**Feedback**

The relevance to authentic engineering aspects was good and overall unit structure was great.

**Recommendation**

Will continue to maintain this level of satisfaction.

#### Feedback from Unit evaluation

**Feedback**

The support was good and enjoyed studying it. The lecturer was well-organised.

**Recommendation**

The teaching team should be well communicated and instructed on all aspects of delivery, assessment, engagement, feedback, etc.

#### Feedback from Unit evaluation

**Feedback**

All things are great in this unit. Still, some people hesitate to speak in front of all.

**Recommendation**

More motivation and openness will be created to make students feel free to ask a question without any hesitation.

#### Feedback from Unit evaluation

**Feedback**

Zoom lecture was found to be ineffective. Instead of Zoom classes, we need a real class.

**Recommendation**

Will be discussed with the management for better options for students.

#### Feedback from Unit evaluation

**Feedback**

Project supervision and guidance style should be improved and consistent across teaching team.

**Recommendation**

More thorough instruction and check list will be prepared to provide consistent guidance.

## Unit Learning Outcomes

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

1. Explain the historical impact of engineering on society
2. Explain engineering professionalism and ethics in the Australian context
3. Discuss engineers' roles, responsibilities and the need to employ principles of sustainable development
4. Manage information and documentation
5. Communicate effectively across a range of contexts
6. Lead or participate collaboratively in teams
7. Demonstrate critical self-review, self-management and lifelong learning

The learning outcomes are linked to Engineers Australia Stage 1 Competencies.

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes								
	1	2		3		4	5	6	7
1 - Knowledge	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>						
2 - Communication				<div><div></div></div>	<div><div></div></div>	<div><div></div></div>			
3 - Cognitive, technical and creative skills									
4 - Research				<div><div></div></div>					
5 - Self-management						<div><div></div></div>	<div><div></div></div>		
6 - Ethical and Professional Responsibility	<div><div></div></div>	<div><div></div></div>	<div><div></div></div>						
7 - Leadership					<div><div></div></div>				
8 - Aboriginal and Torres Strait Islander Cultures									

### Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes							
	1	2	3	4	5	6	7	8
<b>1 - Portfolio - 100%</b>	<div>○</div>	<div>○</div>	<div>○</div>		<div>○</div>	<div>○</div>		

## Textbooks and Resources

### Textbooks

ENEG20001

#### Prescribed

#### **The Making of An Expert Engineer** (2014)

Authors: Trevelyan , J

CRC Press ( Taylor and Francis )

London , UK

ISBN: 9781138026926

Binding: Paperback

#### **Additional Textbook Information**

[View textbooks at the CQUniversity Bookshop](#)

### IT Resources

**You will need access to the following IT resources:**

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

## Referencing Style

No referencing style set.

## Teaching Contacts

**Heena Panchasara** Unit Coordinator

[h.panchasara@cqu.edu.au](mailto:h.panchasara@cqu.edu.au)

## Schedule

### Week 1 - 15 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
		<b>Students to brainstorm project ideas and think about forming your project team.</b>
	<b>Read Trevelyan Chapters;</b>	
<b>Why engineer?</b>	<b>1 Why engineer? 2 What type of engineer? and 3 Flying start, no wings, wrong direction.</b>	<b>Read chapters 1 to 3 from your texts book, and practice writing short writing tasks mentioned in those chapters. Short writing tasks are only for your practice and understanding of writing reflective paper.</b>

### Week 2 - 22 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
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**Full description of reflective paper 1 including its assessment criteria will be made available into unit moodle.**

Module/Topic	Chapter	Events and Submissions/Topic
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Teaching and technical coordination		Teams continue to work on Project proposal. Understand the scopes of the project, finalise research question, do literature review and develop and finalise methodology.
	Read Trevelyan Chapters:	Project presentation (Presentation 1) this week.
	8 Informal teaching: More than an interpreter and 9 Technical coordination: Informal leadership	Presentation time and schedule will be provided in due course.
		Read chapters 8 and 9, and practice writing short writing tasks mentioned in those chapters for preparation for writing reflective paper 2.

#### Week 5 - 12 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
Managing a project		Reflective paper 2: It's time to think about writing reflective paper 2 on learning outcomes 3-5.
		Learning outcome 3: Discuss engineer's roles, responsibilities, and the need to employ principles of sustainable development.
	Read Trevelyan Chapter:  10 Managing a project	Learning outcome 4: Manage information and documentation.  Learning outcome 5: Communicate effectively across a range of contexts.
		Full description of reflective paper 2 including its assessment criteria will be made available into unit moodle.

#### Vacation Week - 19 Aug 2019

Module/Topic	Chapter	Events and Submissions/Topic
Week 6 - 26 Aug 2019		
Module/Topic	Chapter	Events and Submissions/Topic

		Teams continue to work on the project. Target to develop full methodology and generate project solutions.
	Read Trevelyan Chapter:	
Understand investment decision	11 Understanding investment decisions	You will need to submit reflective paper 2 on learning outcomes 3 to 5 this week.
		Reflective paper 2 due: Friday of this week (30th August 2019), 11.59 pm, mid-night

#### Week 7 - 02 Sep 2019

Module/Topic	Chapter	Events and Submissions/Topic
Negotiating sustainability	Read Trevelyan chapter: 12 Negotiating sustainability	Teams continue to work on the project. Target to develop full methodology and generate project solutions.

#### Week 8 - 09 Sep 2019

Module/Topic	Chapter	Events and Submissions/Topic
		Team continue to work on project and generate potential solutions. Begin to generate a framework for evaluating solutions. Start preparing draft report due next week (week 9).
		Your draft report. Prepare a complete outline of final report. This is an important opportunity for you to receive feedback so try to ensure your draft is as complete as possible.
Great expectations	Read Trevelyan chapter:  13 Great expectation	It's time to think about writing reflective paper 3 on learning outcomes 6 and 7. Reflective paper 3 is due in week 9.
		Learning outcome 6: Lead or participate collaboratively in teams.
		Learning outcome 7: Demonstrate critical self-review, self-management and life-long learning.
		Full description of reflective paper 3 and its assessment criteria will be made available into unit moodle site.



**Week 9 - 16 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
		Team continue to work on project and generate potential solutions. Be ready for submitting draft project report this week. Try to include an outline of final report as much as possible.
Seeking work	Read Trevelyan chapter:  14 Seeking work	You will need to submit reflective paper 3 on learning outcomes 6 and 7 this week.  Reflective paper 3 due: Friday of this week (20th September 2019), 11.59 pm, mid-night  Project draft report due: Week 9 Friday (20th Sept 2019), 11.59 pm, mid-night

**Week 10 - 23 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
		Feedback on draft report will be provided this week. Team revise the project report based on the comments and feedback provided by your project supervisor. Read chapter 15 - Conclusions.
Conclusion	Read Trevelyan chapter:  15 Conclusion	Project presentation 2 (Final presentation). Students' will need to present their project findings and results. About 10-15 minutes presentation. The date and time of presentation will be supplied in due course.

**Week 11 - 30 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Project final presentation.		You need to submit your project report this week. Include all the comments and feedback received from draft report and project presentation. Do the proof reading of your report before you submit.
Team project report due this week		Project report due: Week 11 Friday (4th October 2019), 11.59 pm, mid-night.

**Week 12 - 07 Oct 2019**

Module/Topic	Chapter	Events and Submissions/Topic
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**Portfolio Due: Week 12 Friday (11th Oct 2019), 11:59 pm, mid-night.**

Review class.

Individual Portfolio due this week.

The portfolio includes addressing all the assessment criteria. The detailed criteria will be supplied in unit moodle. The portfolio description is given under assessment.

**Portfolio Due:** Week 12 Friday (11 October, 2019) 11:59 pm AEST

**Portfolio Due:** Week 12 Friday (11 Oct 2019) 11:59 pm AEST

#### Review/Exam Week - 14 Oct 2019

Module/Topic	Chapter	Events and Submissions/Topic
Exam Week - 21 Oct 2019		
Module/Topic	Chapter	Events and Submissions/Topic

## Assessment Tasks

### 1 Portfolio

#### Assessment Type

Portfolio

#### Task Description

Your portfolio will demonstrate how you have met the learning outcomes for the unit and to what level. It should be presented in the form of a technical report including a table of contents. You must include evidence from your project work, reflective paper, team work, class activities and readings to demonstrate your achievement of the learning outcomes. There are minimum requirements for the Portfolio and you must provide evidence of the minimum requirements in order to be eligible for a passing grade for this unit.

At the beginning of the term, it is important that you familiarise yourself with the evidence you need to collect so that you can collect the required evidence as you work through the term. During the term you will complete a project as part of a team. You will use your personal contributions to the team project report and team presentation as part of the evidence of your achievement of the learning outcomes. Throughout the term, you will be writing some reflective paper that directly relate to the set readings and the learning outcomes. These will form part of the evidence of your achievement of the learning outcomes.

Individual viva voce. Following the submission of the Portfolio, you may be asked to defend the claims made in your Portfolio against each learning outcome. During the viva voce, you will be asked questions directly related to the portfolio assessment criteria and the evidence you have provided. This may include evidence related to your team work. Your mark for particular portfolio criteria may be affected by your viva voce responses.

Further information on the Portfolio submission is available on the Unit moodle site.

#### Assessment Due Date

Week 12 Friday (11 Oct 2019) 11:59 pm AEST

#### Return Date to Students

Exam Week Friday (25 Oct 2019)

Feedback will be provided

**Weighting**

100%

**Minimum mark or grade**

50%

**Assessment Criteria**

**You must provide evidence of your achievement of each of the Learning Outcomes.**

**There is an Assessment Criteria sheet for this unit available on the Unit Website. The Assessment Criteria sheet gives guidance regarding the type of evidence required for each level of achievement. It is important that you review the Criteria sheet at the beginning of the term so you are familiar with the evidence you need to collect throughout the term.**

**You must provide evidence of the minimum requirements in order to be eligible for a passing grade for this unit.**

**Submission**

Online

**Submission Instructions**

Submissions ghas to be via moodle only

**Learning Outcomes Assessed**

- Explain the historical impact of engineering on society
- Explain engineering professionalism and ethics in the Australian context
- Discuss engineers' roles, responsibilities and the need to employ principles of sustainable development
- Manage information and documentation
- Communicate effectively across a range of contexts
- Lead or participate collaboratively in teams
- Demonstrate critical self-review, self-management and lifelong learning

**Graduate Attributes**

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Self-management
- Ethical and Professional Responsibility

## Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

### What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

### Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

### Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

### What can you do to act with integrity?



#### Be Honest

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



#### Seek Help

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



#### Produce Original Work

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem