



ENEP14004 Engineering Practice Experience

Term 1 - 2022

Profile information current as at 09/05/2024 08:47 pm

All details in this unit profile for ENEP14004 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

Engineering practice is essential for all graduating engineers. In this unit, you will analyse the structure, products, and services of your host organisation. You will demonstrate completing the professional practice requirements of your course. Additionally, you will reflect on attaining Engineers Australia's Stage 1 Competencies using evidence from your e-portfolio, professional practice experience, units studied and other experiences. Finally, you will identify future opportunities aligned with your interests and capabilities to develop a career plan.

Details

Career Level: *Undergraduate*

Unit Level: *Level 4*

Credit Points: *0*

Student Contribution Band: *2*

Fraction of Full-Time Student Load: *0*

Pre-requisites or Co-requisites

Prerequisite: 72cp for CC02 Associate Degree of Engineering students OR otherwise, the final-year Project Planning unit (ENTG13002 OR ENEG14003)

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 1 - 2022

- Online

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 0-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 0 hours of study per week, making a total of 0 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. **Written Assessment**

Weighting: Pass/Fail

Assessment Grading

This is a pass/fail (non-graded) unit. To pass the unit, you must pass all of the individual assessment tasks shown in the table above.

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](#).

Unit Learning Outcomes

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

1. Analyse the structure, products, and services of an engineering organisation
2. Apply skills and knowledge developed in an academic course to practice in an engineering organisation
3. Reflect on and map Engineers Australia's Stage 1 Competency Standards to professional practice activities
4. Develop a strategic approach to personal and professional growth in the workplace.

The Learning Outcomes for this unit are linked with the Engineers Australia Stage 1 Competency Standards for Professional Engineers in the areas of 1. Knowledge and Skill Base, 2. Engineering Application Ability and 3. Professional and Personal Attributes at the following levels:

Advanced

1.1 Comprehensive, theory-based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline. (LO: 2A 3A)

1.2 Conceptual understanding of the mathematics, numerical analysis, statistics, and computer and information sciences which underpin the engineering discipline. (LO: 2A 3A)

1.3 In-depth understanding of specialist bodies of knowledge within the engineering discipline. (LO: 2A 3A)

1.4 Discernment of knowledge development and research directions within the engineering discipline. (LO: 2A 3A)

1.5 Knowledge of engineering design practice and contextual factors impacting the engineering discipline. (LO: 2A 3A)

1.6 Understanding of the scope, principles, norms, accountabilities, and bounds of sustainable engineering practice in the specific discipline. (LO: 2A 3A)

2.1 Application of established engineering methods to complex engineering problem solving. (LO: 2A 3A)

2.2 Fluent application of engineering techniques, tools and resources. (LO: 2A 3A)

2.3 Application of systematic engineering synthesis and design processes. (LO: 2A 3A)

2.4 Application of systematic approaches to the conduct and management of engineering projects. (LO: 2A 3A)

3.1 Ethical conduct and professional accountability. (LO: 1A 2A 3A 4A)

3.2 Effective oral and written communication in professional and lay domains. (LO: 1A 2A 3A 4A)

3.3 Creative, innovative, and pro-active demeanour. (LO: 1A 2A 3A 4A)

3.4 Professional use and management of information. (LO: 1A 2A 3A 4A)

3.5 Orderly management of self, and professional conduct. (LO: 1A 2A 3A 4A)

3.6 Effective team membership and team leadership. (LO: 1A 2A 3A 4A)

Note: LO refers to the Learning Outcome number(s) which link to the competency and the levels: N - Introductory, I - Intermediate and A - Advanced.

Refer to the Engineering Undergraduate Course Moodle site for further information on the Engineers Australia's Stage 1 Competency Standard for Professional Engineers and course level mapping information

<https://moodle.cqu.edu.au/course/view.php?id=1511>



Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Communication	•		•	•
2 - Problem Solving		•		
3 - Critical Thinking	•	•	•	•
4 - Information Literacy	•			
5 - Team Work		•		
6 - Information Technology Competence		•		
7 - Cross Cultural Competence		•		
8 - Ethical practice		•		•
9 - Social Innovation		•		
10 - Aboriginal and Torres Strait Islander Cultures				

Textbooks and Resources

Textbooks

There are no required textbooks.

IT Resources

You will need access to the following IT resources:

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

Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)
 For further information, see the Assessment Tasks.

Teaching Contacts

Mehdi Mirzababaei Unit Coordinator
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Schedule

Week 1 - 07 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
Requirements of Continuing Professional Development		

Week 2 - 14 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
Engineering Practice Report		

Week 3 - 21 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
Reflection on Engineers Australia Stage 1 Competencies		

Week 4 - 28 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
Preparing a standard Curriculum Vitae		

Week 5 - 04 Apr 2022

Module/Topic	Chapter	Events and Submissions/Topic
There is no regular teaching for this unit. However, students can request Zoom-meeting sessions to assist them with their inquiries.		

Vacation Week - 11 Apr 2022

Module/Topic	Chapter	Events and Submissions/Topic
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Week 6 - 18 Apr 2022

Module/Topic	Chapter	Events and Submissions/Topic
		Please complete <Engineering Practice Report> component of the Portfolio and submit it.

Week 7 - 25 Apr 2022

Module/Topic	Chapter	Events and Submissions/Topic
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Week 8 - 02 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
		Please complete <Reflection on Engineers Australia Stage One Competencies> component of the Portfolio and submit it.

Week 9 - 09 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
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Week 10 - 16 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
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Please complete <Curriculum Vitae> component of the Portfolio and submit it.

Portfolio Due: Week 10 Friday (20 May 2022) 11:55 pm AEST

Week 11 - 23 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
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Week 12 - 30 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
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Review/Exam Week - 06 Jun 2022

Module/Topic	Chapter	Events and Submissions/Topic
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Exam Week - 13 Jun 2022

Module/Topic	Chapter	Events and Submissions/Topic
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Term Specific Information

Requirements of Professional Work Experience number of hours:

1) Bachelor of Engineering (Honours): A minimum of **12 weeks (480 hours)** of approved work experience in an engineering environment.

2) Bachelor of Engineering Technology: A minimum of **9 weeks (360 hours)** of approved work experience in an engineering environment

3) Associate Degree of Engineering: A minimum of **6 weeks (240 hours)** of approved work experience in an engineering environment.

As proof of work experience, students will be required to submit a formal report indicating the type of work done, the degree of responsibility involved, the person(s) to whom the student was directly responsible, and the general activities of the employer. This report should be certified by the employer.

Assessment Tasks

1 Portfolio

Assessment Type

Written Assessment

Task Description

The portfolio comprises of three separate sections that should be submitted separately. These sections include:

1) Engineering Practice Report:

Each student must have gained and then report on a minimum number of hours approved industry experience in an appropriate area of engineering as follows:

- A minimum of 12 weeks or 480 hours for Bachelor of Engineering (Honours);
- A minimum of 9 weeks or 360 hours for Bachelor of Engineering Technology; and
- A minimum of 6 weeks or 240 hours for Associate Degree of Engineering.

The student must submit a report indicating the type of work done, the degree of responsibility involved, the person(s) to whom the student was directly responsible, and the general activities of the employer. Please note that even if you are working full-time in industry whilst studying, you must still submit a report.

2) Reflection on Engineers Australia Stage One Competencies:

The students must reflect on how they have met each of Engineers Australia Stage 1 competencies with a sound and supported evidence. Students may use evidence from their e-Portfolio, assessments, tasks completed on work experience and other relevant activities. Therefore, a good e-Portfolio will be very helpful. Students must mention the tasks completed and reflect on their skill development and knowledge.

3) Curriculum Vitae:

Students must prepare an appropriate CV with a brief career plan that includes short-, medium-, and long-term career goals and objectives to attain them.

The combination of above tasks will complete your portfolio. Please note that the Portfolio has zero weighting since this unit is a zero-credit type and you will be marked as Pass or Fail. Once you have passed each of above tasks successfully, it is deemed that you have passed the portfolio.

Assessment Due Date

Week 10 Friday (20 May 2022) 11:55 pm AEST

Return Date to Students

Exam Week Friday (17 June 2022)

Weighting

Pass/Fail

Assessment Criteria

1) Marking Criteria of Engineering Practice Report

Students are required to clearly demonstrate satisfactory achievement of the following components:

1) An understanding of their strengths and weaknesses in their:

- a) engineering knowledge and skills (integration, problem identification, critical thinking, problem solving, decision making and ethics);
- b) team and interpersonal attributes (social skills, initiative and independence); and
- c) professional practice (technical skills, time management, verbal and written communication).

2) The practice of engineering in the industry in which the student has been engaged in since enrolled into a relevant course of study.

3) Enhanced knowledge of technical disciplines in the employer's industry.

Students must demonstrate the achievement of their engineering practice through a combination of the following engineering practice reporting and assessment activities.

- Compulsory Requirements: Engineering Practice Certification, Engineering Practice Report, Employer Evaluation of Student
- Recommended documents: Weekly Activity Log & Weekly Reflective Journal

Please note that failure to complete and submit the compulsory activities of Engineering Practice will result in the student being deemed ineligible to graduate.

2) Marking Criteria of Reflection on Engineers Australia Stage One Competencies:

This is the mapping of your skills against the Engineers Australia Stage 1 competencies for professional engineers. You must describe how you have met each of the competency items and reflect on what skills you have developed or enhanced so far and how you will utilize them in your future career. This mapping must be prepared using the provided template.

3) Marking Criteria of Curriculum Vitae:

This part assesses the quality of your professional CV. You must use the provided template to prepare your CV. It is suggested that you think carefully about who you want to nominate to be your referees as they need to be relevant to your experiences and they may be contacted to verify information you have claimed.

Referencing Style

- [Harvard \(author-date\)](#)

Submission

Online

Submission Instructions

Please submit a Microsoft Word document file (not a PDF file).

Learning Outcomes Assessed

- Analyse the structure, products, and services of an engineering organisation
- Apply skills and knowledge developed in an academic course to practice in an engineering organisation
- Reflect on and map Engineers Australia's Stage 1 Competency Standards to professional practice activities
- Develop a strategic approach to personal and professional growth in the workplace.

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