

#### Profile information current as at 07/05/2024 12:04 am

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 <u>Assessment Policy and</u> <u>Procedure (Higher Education Coursework)</u>.

## Offerings For Term 2 - 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

<u>Metropolitan Campuses</u> Adelaide, Brisbane, Melbourne, Perth, Sydney

## Assessment Overview

Written Assessment
 Weighting: Pass/Fail
 Written Assessment
 Weighting: Pass/Fail
 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 <u>CQUniversity Policy site</u>.

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 <u>CQUniversity Policy site</u>.

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

# Alignment of Learning Outcomes, Assessment and Graduate Attributes

- N/A evel Introductory - Intermediate - Graduate - Professional - Advanced Level

## Alignment of Assessment Tasks to Learning Outcomes

| Assessment Tasks                                    | Lea | 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: <u>Harvard (author-date)</u> For further information, see the Assessment Tasks.

# Teaching Contacts

Kali Nepal Unit Coordinator k.nepal@cqu.edu.au

# Schedule

| Week 1 Engineering Professional Practice: Initial Workshop - 11 Jul 2022  |                                    |  |  |  |  |  |
|---|------------------------------------|--|--|--|--|--|
| Module/Topic  | Chapter                            | Events and Submissions/Topic   |  |  |  |  |
| Initial workshop  | -                                  | <ul> <li>Curriculum vitae</li> <li>Reflection on Engineers Australia</li> <li>Stage 1 competencies</li> <li>Engineering practice report</li> </ul> |  |  |  |  |
| Week 2 - 18 Jul 2022  |                                    |  |  |  |  |  |
| Module/Topic  | Chapter                            | <b>Events and Submissions/Topic</b>  |  |  |  |  |
| Week 3 - 25 Jul 2022  |                                    |  |  |  |  |  |
| Module/Topic  | Chapter                            | <b>Events and Submissions/Topic</b>  |  |  |  |  |
| Week 4 - 01 Aug 2022  |                                    |  |  |  |  |  |
| Module/Topic  | Chapter                            | Events and Submissions/Topic   |  |  |  |  |
| Week 5 - 08 Aug 2022  |                                    |  |  |  |  |  |
| Module/Topic  | Chapter                            | Events and Submissions/Topic   |  |  |  |  |
| Vacation Week - 15 Aug 2022   |                                    |  |  |  |  |  |
| Module/Topic  | Chapter                            | Events and Submissions/Topic   |  |  |  |  |
| Week 6 Engineering Professional Practice: Mid-term workshop - 22 Aug 2022 |                                    |  |  |  |  |  |
| Module/Topic  | Chapter                            | <b>Events and Submissions/Topic</b>  |  |  |  |  |
| Mid-term workshop (updates)   |                                    | Updates on:<br>• Curriculum vitae<br>• Reflection on Engineers Australia<br>Stage 1 competencies<br>• Engineering practice report                  |  |  |  |  |
| Week 7 - 29 Aug 2022  |                                    |  |  |  |  |  |
| Module/Topic  | Chapter                            | <b>Events and Submissions/Topic</b>  |  |  |  |  |
| Week 8 Engineering Professional P   | ractice: Before submission worksho | p (finalising) - 05 Sep 2022   |  |  |  |  |
| Module/Topic  | Chapter                            | <b>Events and Submissions/Topic</b>  |  |  |  |  |
| Before submission workshop<br>(finalising)                                |                                    | Finalising documents on:<br>• Curriculum vitae<br>• Reflection on Engineers Australia<br>Stage 1 competencies<br>• Engineering practice report     |  |  |  |  |
| Week 9 - 12 Sep 2022  |                                    |  |  |  |  |  |
| Module/Topic  | Chapter                            | <b>Events and Submissions/Topic</b>  |  |  |  |  |
|   |                                    | Complete " <b>Curriculum Vitae</b> " and submit  |  |  |  |  |
|   |                                    | <b>Curriculum Vitae</b> Due: Week 9 Friday (16 Sept 2022) 11:55 pm AEST  |  |  |  |  |

| Week 10 - 19 Sep 2022          |         |  |
|--------------------------------|---------|--|
| Module/Topic                   | Chapter | <b>Events and Submissions/Topic</b>  |
|                                |         | Complete "Reflection on Engineers<br>Australia Stage One<br>Competencies" and submit                               |
|                                |         | Reflection on Engineers Australia<br>Stage One Competencies Due:<br>Week 10 Friday (23 Sept 2022) 11:55<br>pm AEST |
| Week 11 - 26 Sep 2022          |         |  |
| Module/Topic                   | Chapter | <b>Events and Submissions/Topic</b>  |
|                                |         | Complete "Engineering Practice<br>Report" and submit   |
|                                |         | <b>Engineering practice report</b> Due:<br>Week 11 Friday (30 Sept 2022) 11:55<br>pm AEST                          |
| Week 12 - 03 Oct 2022          |         |  |
| Module/Topic                   | Chapter | <b>Events and Submissions/Topic</b>  |
| Review/Exam Week - 10 Oct 2022 |         |  |
| Module/Topic                   | Chapter | <b>Events and Submissions/Topic</b>  |
| Exam Week - 17 Oct 2022        |         |  |
| Module/Topic                   | Chapter | Events and Submissions/Topic   |

## Assessment Tasks

# 1 Curriculum Vitae

#### **Assessment Type** Written Assessment

## **Task Description**

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.

## **Assessment Due Date**

Week 9 Friday (16 Sept 2022) 11:55 pm AEST

## **Return Date to Students**

Week 11 Friday (30 Sept 2022)

Weighting Pass/Fail

### **Assessment Criteria**

This assesses the quality of your professional 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

### Learning Outcomes Assessed

Reflect on and map Engineers Australia's Stage 1 Competency Standards to professional practice activities

# 2 Reflection on Engineers Australia Stage One Competencies

## Assessment Type

Written Assessment

### **Task Description**

The students must reflect on how they have met each of Engineers Australia Stage 1 competencies with sound and supported evidences. Students may use evidences 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.

### Assessment Due Date

Week 10 Friday (23 Sept 2022) 11:55 pm AEST

## **Return Date to Students**

Week 12 Friday (7 Oct 2022)

Weighting Pass/Fail

### **Assessment Criteria**

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.

### **Referencing Style**

• Harvard (author-date)

### Submission

Online

#### Learning Outcomes Assessed

• Develop a strategic approach to personal and professional growth in the workplace.

## 3 Engineering practice report

### Assessment Type

Written Assessment

### **Task Description**

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.

#### **Assessment Due Date**

Week 11 Friday (30 Sept 2022) 11:55 pm AEST

Return Date to Students

Review/Exam Week Friday (14 Oct 2022)

#### Weighting Pass/Fail

### **Assessment Criteria**

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.

#### **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

# 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 <u>Academic Learning Centre (ALC)</u> can support you in becoming confident in completing assessments with integrity and of high standard.

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





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