ENTG13001 *Engineering Technology Project Implementation*
Term 1 - 2019

Profile information current as at 30/04/2024 10:47 am

General Information

Overview

As a student in the final year of your Bachelor of Engineering Technology course, you will work independently to manage and implement a project (planned in ENTG13002) that allows you to demonstrate professional capabilities expected of graduating engineering technologists. You will work and learn autonomously, communicate progress and prepare reports and presentations. You will conduct research to support your project decision-making, and you are required to demonstrate critical thinking and document sound analysis and judgement in project working documents and final reporting. You will solve technical problems that arise and evaluate project processes, outcomes and related learning experiences, and you will prepare a formal report, poster and project presentation. Note that if you completed the prerequisite Planning unit more than two terms ago then you need to check with your academic adviser to see if the project is still available.

Details

Career Level: *Undergraduate*
Unit Level: *Level 3*
Credit Points: *6*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites

Pre-requisite: ENTG13002 Engineering Technology Project Planning
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 - 2019

- Bundaberg
- Cairns
- Gladstone
- Mackay
- Online
- 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 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 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. **Presentation**
Weighting: 10%
2. **Written Assessment**
Weighting: 10%
3. **Written Assessment**
Weighting: 10%
4. **Presentation**
Weighting: 10%
5. **Thesis/Dissertation**
Weighting: 60%

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 coordinator reflection

Feedback

Some students and projects are not progressing as expected.

Recommendation

Students need to identify project changes earlier so they can still complete on time.

Feedback from Unit coordinator reflection

Feedback

Adjustment of GECon into week 12 of term has impacted the assessment items and associated due dates.

Recommendation

Assessments and weightings will be updated for 2019 offerings.

Unit Learning Outcomes

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

1. Apply and reflect on Engineers Australia's Stage One Competencies for Engineering Technologists to the planning and implementation phases of engineering projects
2. Implement the project plan prepared in the Planning unit in consultation with and guidance from your project advisor(s)
3. Think critically, demonstrate sound analysis and make rational judgements and decisions in the implementation phases of your project
4. Communicate preliminary results to project advisor(s) promptly to solicit timely and constructive feedback
5. Prepare professional project documents that convey the processes and outcomes of your project
6. Communicate your project outcomes to project advisor(s), other stakeholders and the wider community.

By completing this unit and the preceding Planning unit each student will meet Engineers' Australia's Stage One Competencies for Engineering Technologists to a substantial degree.

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level | ◦ Introductory Level | • Intermediate Level | • Graduate Level | ◦ Professional Level | ◦ Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes										
				1			2	3	4	5	6
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											

Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Presentation - 10%	•	•	•	•	•	•	•	•		
2 - Written Assessment - 10%	•	•	•	•	•	•	•	•		
3 - Written Assessment - 10%	•	•	•	•	•	•	•	•		
4 - Presentation - 10%	•	•	•	•	•	•	•	•		
5 - Thesis/Dissertation - 60%	•	•	•	•	•	•	•	•		

Textbooks and Resources

Textbooks

ENTG13001

Supplementary

The Thinker's Guide to Engineering Reasoning
Edition: 2nd (2013)
Authors: Richard Paul, Dr. Robert Niewoehner and Linda Elder
Foundation for Critical Thinking
Tomales , CA , USA
ISBN: 978-0-9857544-1-9
Binding: Paperback

Additional Textbook Information
Paper copies are available at the CQUni Bookshop here: http://bookshop.cqu.edu.au (search on the Unit code)
Also available as a Kindle Edition. Check Amazon

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Presentation software such as MS Powerpoint
- Project management software such as MS Project
- Software specific to project
- Webcam and headset for on-line sessions.
- Word processing software such as MS Word

Referencing Style

All submissions for this unit must use the referencing styles below:

- Harvard (author-date)
- Turabian

For further information, see the Assessment Tasks.

Teaching Contacts

Justin Hyde Unit Coordinator
j.hyde@cqu.edu.au

Schedule

Week 1 - 11 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic
Commence implementation of your project plan prepared in the Planning unit.		Share progress with advisor(s)

Week 2 - 18 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic

Check with your advisor(s) and other project stakeholders to see if there is any new information which may impact your project. Modify your project plan if required.		Share progress with advisor(s)

Week 3 - 25 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic
Commence work on your project report layout. A good place to start is by drafting the likely headings.		Share progress with advisor(s)

Week 4 - 01 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
Start thinking about your poster, maybe research what a poster should look like and contain.		Share progress with advisor(s)

Week 5 - 08 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
Start preparing your project update presentation which is scheduled for week 6.		Share progress with advisor(s)

Vacation Week - 15 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
Check Moodle for guidance on your project update presentation.		Share progress with advisor(s)

Week 6 - 22 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
Present your project update presentation to your academic advisor and other academics in your discipline.Take notes from the advice and guidance given after your presentation.		Share progress with advisor(s) **Project Update Presentation** Due: Week 6 Wednesday (24 Apr 2019) 1:00 pm AEST

Week 7 - 29 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
Start preparing your preliminary results document. Check Moodle for guidance on your preliminary results.		Share progress with advisor(s)

Week 8 - 06 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
Invite your academic advisor to provide guidance by submitting your preliminary results. You may also consider submitting your preliminary results document to your industry advisor (if applicable).		Share progress with advisor(s) **Preliminary Results** Due: Week 8 Monday (6 May 2019) 9:00 am AEST

Week 9 - 13 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
Discuss your project poster with your academic advisor.		Share progress with advisor(s)

Week 10 - 20 May 2019

Module/Topic	Chapter	Events and Submissions/Topic

Use the advice and guidance from your project update presentation and preliminary results to refine your thesis, poster and final project presentation.		Share progress with advisor(s)

Week 11 - 27 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
Check Moodle for guidance on your thesis, poster and final project presentation. Review and reflect on your attainment of Engineers Australia's Stage One Competencies.		Share progress with advisor(s). **Project Poster** Due: Week 11 Friday (31 May 2019) 9:00 am AEST

Week 12 - 03 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic
Your thesis and reflections should be finalised this week. Present your findings at the CQU Engineering Showcase which is scheduled for Wednesday of week 12.		Share progress with advisor(s) **Final Project Presentation** Due: Week 12 Wednesday (5 June 2019) 1:00 pm AEST

Review/Exam Week - 10 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic
Submit your thesis including reflections.		Share progress with advisor(s) **Thesis** Due: Review/Exam Week Monday (10 June 2019) 9:00 am AEST

Exam Week - 17 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Project Update Presentation

Assessment Type
Presentation

Task Description
Prepare a ten-minute presentation which updates your academic advisor and other academics on your project progress. Be prepared to answer questions about your project and take further advice and guidance from the audience. Presentations are scheduled for Wednesday 24th April 2019 (week 6), 13h00-15h00 and 18h00-20h00 Queensland times. Please ensure you are available at these times. No extensions are possible.

Assessment Due Date
Week 6 Wednesday (24 Apr 2019) 1:00 pm AEST

Return Date to Students
Week 8 Wednesday (8 May 2019)
Advice and guidance will be given verbally immediately after your presentation. Please take your own notes. A mark will be awarded in Moodle.

Weighting
10%

Assessment Criteria
Accuracy and clarity of presentation slides.
Appropriateness of presentation.
Duration of presentation.

Communication of progress to date.
Answer any questions appropriately.
Performance guidelines for the assessment criteria will be available in Moodle.

Referencing Style

- Harvard (author-date)
- Turabian

Submission
No submission method provided.

Submission Instructions
No submission required. Just deliver your presentation at the scheduled time.

Learning Outcomes Assessed

- Implement the project plan prepared in the Planning unit in consultation with and guidance from your project advisor(s)
- Communicate preliminary results to project advisor(s) promptly to solicit timely and constructive feedback

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

2 Preliminary Results

Assessment Type
Written Assessment

Task Description
Prepare a document with your preliminary project results. This document can be used to develop the results section of your final report.

Assessment Due Date
Week 8 Monday (6 May 2019) 9:00 am AEST

Return Date to Students
Week 10 Monday (20 May 2019)

Weighting
10%

Assessment Criteria
Accuracy and clarity of written document.
Appropriateness of preliminary results.
Performance guidelines for the assessment criteria will be available in Moodle.

Referencing Style

- Harvard (author-date)
- Turabian

Submission
Online

Learning Outcomes Assessed

- Implement the project plan prepared in the Planning unit in consultation with and guidance from your project advisor(s)
- Communicate preliminary results to project advisor(s) promptly to solicit timely and constructive feedback

Graduate Attributes

- Communication

- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

3 Project Poster

Assessment Type
Written Assessment

Task Description
Prepare a poster which communicates your project results to the wider community.

Assessment Due Date
Week 11 Friday (31 May 2019) 9:00 am AEST

Return Date to Students
Review/Exam Week Friday (14 June 2019)

Weighting
10%

Assessment Criteria
Accuracy and clarity of poster.
Appropriateness of poster for communication of project results.
Performance guidelines for the assessment criteria will be available in Moodle.

Referencing Style

- Harvard (author-date)
- Turabian

Submission
Online

Learning Outcomes Assessed

- Prepare professional project documents that convey the processes and outcomes of your project
- Communicate your project outcomes to project advisor(s), other stakeholders and the wider community.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

4 Final Project Presentation

Assessment Type
Presentation

Task Description
Prepare a ten-minute presentation which reviews your project and project outcomes. Deliver your presentation at the CQU Engineering Showcase on Wednesday 5th June 2019. Ensure you are available on this day.

Assessment Due Date
Week 12 Wednesday (5 June 2019) 1:00 pm AEST

Return Date to Students
Exam Week Wednesday (19 June 2019)

Weighting
10%

Minimum mark or grade
50%

Assessment Criteria
Accuracy and clarity of presentation slides.
Appropriateness of presentation.
Duration of presentation.
Communication of project results.
Answer any questions appropriately.
Performance guidelines for the assessment criteria will be available in Moodle.

Referencing Style

- Harvard (author-date)
- Turabian

Submission
No submission method provided.

Submission Instructions
No submission required. Just deliver your presentation at the scheduled time.

Learning Outcomes Assessed

- Apply and reflect on Engineers Australia's Stage One Competencies for Engineering Technologists to the planning and implementation phases of engineering projects
- Think critically, demonstrate sound analysis and make rational judgements and decisions in the implementation phases of your project
- Communicate your project outcomes to project advisor(s), other stakeholders and the wider community.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

5 Thesis

Assessment Type
Thesis/Dissertation

Task Description
Prepare a thesis which communicates your project and results effectively. The first appendix of your thesis should contain your reflections on your attainment of the Engineers Australia's Stage One Competencies and demonstrate that you have applied a substantial degree of Engineers Australia's Stage One Competencies to the implementation phases of your project.
Your thesis should be structured as follows with each section starting on a new page:

- Title page
- Summary
- Acknowledgments
- Table of Contents
- List of Figures
- List of Tables
- Glossary/Nomenclature
- Introduction to the Project and Thesis
- Literature Review

- Project Methodology Review
- Results and Discussion
- Conclusion
- Appendix 1 - Reflections on your attainment of Engineers Australias Stage One Competencies
- Other appendices as appropriate (please note that other appendices will not be graded)

Further guidance and other resources are available in Moodle.

Assessment Due Date
Review/Exam Week Monday (10 June 2019) 9:00 am AEST

Return Date to Students

At certification of grades

Weighting
60%

Minimum mark or grade
50%

Assessment Criteria
Accuracy and clarity of report and reflections
Appropriateness of report and reflections
Performance guidelines for the assessment criteria will be available in Moodle.

Referencing Style

- Harvard (author-date)
- Turabian

Submission
Online

Learning Outcomes Assessed

- Apply and reflect on Engineers Australia's Stage One Competencies for Engineering Technologists to the planning and implementation phases of engineering projects
- Think critically, demonstrate sound analysis and make rational judgements and decisions in the implementation phases of your project
- Prepare professional project documents that convey the processes and outcomes of your project

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice

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