ENRP20003 *Engineering Research Project Implementation*
Term 1 - 2020

Profile information current as at 03/05/2024 08:01 pm

All details in this unit profile for ENRP20003 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
This unit is designed so that students can complete an investigative study through the analysis of, reflection on and critique of, an area of their professional practice that was commenced in Engineering Research Project Planning. By completing this project, students will contribute to the body of knowledge for their discipline. Students will present their project in a thesis and a professional presentation.

Details
Career Level: *Postgraduate*
Unit Level: *Level 9*
Credit Points: *12*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.25*

Pre-requisites or Co-requisites
Prerequisite: ENRP20001 Engineering Research 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 - 2020

- 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. **Report**
Weighting: 20%
2. **Presentation**
Weighting: 20%
3. **Portfolio**
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 Evaluation record; Unit Coordinator

Feedback

The unit provides excellent knowledge base for research projects.

Recommendation

Recommended to continue teaching the unit using regular lecture, tutorial, and effective and individual supervision. Marking assignments and providing fruitful feedback in due time is highly recommended.

Feedback from Unit Evaluation record

Feedback

Very limited resources and equipment for experimental research.

Recommendation

Additional resources are strongly recommended to enable students pursue more experimental research in their chosen discipline.

Feedback from Unit Evaluation record

Feedback

Extended library hours and resources.

Recommendation

Library resources should be increased such as text and reference books, and the number of computers. Considering project students are busy Monday to Thursday in Internship, library hours should be up to 8 pm every day (all 7 days) and exam period longer working hours as suggested by students.

Feedback from Unit Evaluation record; Unit Coordinator

Feedback

Students must be guided to learn software required for project.

Recommendation

Supervisors recommending a software for students should train them up. However, students must be proactive and pick up several skills through self-learning.

Unit Learning Outcomes

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

1. Implement the project plan prepared in the Planning unit with consultation and guidance from your project advisers and stakeholders
2. Think critically, demonstrate sound analysis, and make rational, justifiable decisions in order to find the optimal, sustainable solution
3. Demonstrate leadership by contributing to the body of knowledge related to the discipline area and participating in professional networks
4. Communicate preliminary results to stakeholders through interim and regular progress reports to solicit timely and constructive feedback
5. Communicate findings using written and oral methods to inform both internal and external workplace practicing professionals
6. Critically reflect on self-performance and develop a plan for lifelong and professional learning.

n/a

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
1 - Report - 20%	•			•		•
2 - Presentation - 20%		•	•		•	
3 - Portfolio - 60%	•	•	•	•	•	

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
1 - Knowledge		°	°		°	°
2 - Communication	°		°	°	°	°
3 - Cognitive, technical and creative skills	°	°	°		°	°
4 - Research	°	°	°	°	°	°
5 - Self-management			°		°	°
6 - Ethical and Professional Responsibility		°	°	°		°
7 - Leadership		°	°	°		°
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
1 - Report - 20%	°	°	°	°	°			
2 - Presentation - 20%	°	°	°	°		°	°	
3 - Portfolio - 60%	°	°	°	°		°	°	

Textbooks and Resources

Textbooks

There are no required textbooks.

Additional Textbook Information

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

Raj Sharma Unit Coordinator
r.sharma@cqu.edu.au

Schedule

Week 1 - 09 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Organise a weekly meeting time and place/zoom with your advisor. Discuss with your advisor on how to address the feedback, advice and guidance given on your planning report by reviewers. Prepare a new project plan if required. Commence implementation of your project plan. Prepare project report layout.		Meet with your advisor on a weekly basis and share your progress in the meeting. You are required to keep the meeting records and forward to your advisor after the meeting every week.

Week 2 - 16 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Report: Work on introduction and objectives		Meet with your advisor on a weekly basis and share your progress in the meeting. You are required to keep the meeting records and forward to your advisor after the meeting every week.

Week 3 - 23 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Report: Work on literature review		Meet with your advisor on a weekly basis and share your progress in the meeting. You are required to keep the meeting records and forward to your advisor after the meeting every week.

Week 4 - 30 Mar 2020

Module/Topic	Chapter	Events and Submissions/Topic
Report: Work on research methodology		Meet with your advisor on a weekly basis and share your progress in the meeting. You are required to keep the meeting records and forward to your advisor after the meeting every week.

Week 5 - 06 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Start thinking on how your results can be presented and analysed to make it useful to stakeholders.		Meet with your advisor on a weekly basis and share your progress in the meeting. You are required to keep the meeting records and forward to your advisor after the meeting every week.

Vacation Week - 13 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Keep working on your project		

Week 6 - 20 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Report: Prepare preliminary results document		Meet with your advisor on a weekly basis and share your progress in the meeting. You are required to keep the meeting records and forward to your advisor after the meeting every week.

Week 7 - 27 Apr 2020

Module/Topic	Chapter	Events and Submissions/Topic
Submit the preliminary results document. Report: Work on Results and discussion		Meet with your advisor on a weekly basis and share your progress in the meeting. You are required to keep the meeting records and forward to your advisor after the meeting every week. **Preliminary Results** Due: Week 7 Monday (27 Apr 2020) 11:45 pm AEST

Week 8 - 18 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Report: Work on Results and discussion		Meet with your advisor on a weekly basis and share your progress in the meeting. You are required to keep the meeting records and forward to your advisor after the meeting every week.

Week 9 - 25 May 2020

Module/Topic	Chapter	Events and Submissions/Topic
Report: Work on Results and discussion		Meet with your advisor on a weekly basis and share your progress in the meeting. You are required to keep the meeting records and forward to your advisor after the meeting every week.

Week 10 - 01 Jun 2020

Module/Topic	Chapter	Events and Submissions/Topic

| Reflect on Stage One Competencies of Engineers Australia and write a reflective paper.
Prepare for the final project presentation. You should present to your supervisor during this week's meeting and seek their advice and guidance to improve. | | Meet with your advisor on a weekly basis and share your progress in the meeting. You are required to keep the meeting records and forward to your advisor after the meeting every week.

Thesis Due: Week 12 Friday (5 June 2020) 11:45 pm AEST |

Week 11 - 08 Jun 2020

Module/Topic	**Chapter**	**Events and Submissions/Topic**
Work on your thesis and presentation slides.		Meet with your advisor on a weekly basis and share your progress in the meeting. You are required to keep the meeting records and forward to your advisor after the meeting every week. **Presentation** Due: Review/Exam Week Monday (8 June 2020) 11:45 pm AEST

Week 12 - 15 Jun 2020

Module/Topic	**Chapter**	**Events and Submissions/Topic**
Include reflective paper as Appendix 1 of the Thesis. Complete your thesis and submit.		

Assessment Tasks

1 Preliminary Results

Assessment Type
Report

Task Description
Prepare a document with your preliminary project results and discussion. Even though the result section carries higher marks, the document should include:

- Title page
- Abstract
- Keywords
- Introduction and Background
- Objective/s of Research
- Literature Review
- Methodology
- Results and Discussion
- Conclusion and Future Works
- List of References
- Appendix (if applicable)
- Responses to oral and written feedback, comments and advice given by reviewers in planning the term and by your advisor during this term

Assessment Due Date
Week 7 Monday (27 Apr 2020) 11:45 pm AEST

Return Date to Students

Weighting
20%

Assessment Criteria
The extent to which:

- feedback, advice and comments are responded.
- project background and context are used to justify the project.

- literature is used to support the project.
- objectives are clearly outlined.
- appropriate methodology is used.
- preliminary results are correct and properly presented.
  The focus of this report is on preliminary results so the results section carries higher marks. Detailed assessment criteria will be available on the course website.

Referencing Style

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

Submission
Online

Submission Instructions
pdf file

Learning Outcomes Assessed

- Implement the project plan prepared in the Planning unit with consultation and guidance from your project advisers and stakeholders
- Communicate preliminary results to stakeholders through interim and regular progress reports to solicit timely and constructive feedback
- Critically reflect on self-performance and develop a plan for lifelong and professional learning.

Graduate Attributes

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Self-management

2 Presentation

Assessment Type
Presentation

Task Description
Prepare a ten-minute presentation to show your project findings followed by 5 minutes of Q&A session. This assessment generally cannot be rescheduled as this has to be delivered on a fixed date and location.

Assessment Due Date
Review/Exam Week Monday (8 June 2020) 11:45 pm AEST
Exact schedule of presentation will be available on the course website.

Return Date to Students

Feedback on the presentations will be provided immediately after the presentation. No written feedback will be given.

Weighting
20%

Minimum mark or grade
50%

Assessment Criteria
This assessment will be evaluated based on the following criteria

- Accuracy and clarity of presentation slides
- Technical knowledge
- Oral communication
- Answer to the questions
- Overall quality of the presentation

Detailed assessment criteria will be available on the course website.

Referencing Style

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

Submission
Online

Submission Instructions
Bring your presentation slides and deliver the presentation at your scheduled time.

Learning Outcomes Assessed

- Think critically, demonstrate sound analysis, and make rational, justifiable decisions in order to find the optimal, sustainable solution
- Demonstrate leadership by contributing to the body of knowledge related to the discipline area and participating in professional networks
- Communicate findings using written and oral methods to inform both internal and external workplace practicing professionals

Graduate Attributes

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Ethical and Professional Responsibility
- Leadership

3 Thesis

Assessment Type
Portfolio

Task Description
Submit the final thesis.

Assessment Due Date
Week 12 Friday (5 June 2020) 11:45 pm AEST

Return Date to Students

Weighting
60%

Minimum mark or grade
50%

Assessment Criteria
Final thesis will be evaluated based on overall quality of the project, analysis of results and written report. Detail assessment criteria will be available on the unit website.

Referencing Style

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

Submission
Online

Learning Outcomes Assessed

- Implement the project plan prepared in the Planning unit with consultation and guidance from your project advisers and stakeholders
- Think critically, demonstrate sound analysis, and make rational, justifiable decisions in order to find the optimal, sustainable solution
- Demonstrate leadership by contributing to the body of knowledge related to the discipline area and participating in professional networks
- Communicate preliminary results to stakeholders through interim and regular progress reports to solicit timely and constructive feedback
- Communicate findings using written and oral methods to inform both internal and external workplace practicing professionals

Graduate Attributes

- Knowledge
- Communication
- Cognitive, technical and creative skills

- Research
- Ethical and Professional Responsibility
- Leadership

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