ENRP20003 *Engineering Research Project Implementation*

Term 1 - 2017

Profile information current as at 12/10/2024 01:23 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, a professional presentation and a technical paper.

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

Departmental consent required. Students must have successfully completed the Planning phase of the project before being enrolled in 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 1 - 2017

- Distance

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 Course evaluation

Feedback

Good aspects: Coaching and mentoring by the supervisor - Dr Subhash

Recommendation

Will try to maintain

Feedback from Course evaluation

Feedback

What aspects of the course are most in need of improvement: Time frame for completion for FIFO workers on longer rosters.

Recommendation

Special arrangement can be negotiated for those type of students.

Unit Learning Outcomes

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

1. Analyse and synthesise information gathered in order to develop a sustainable and socially responsible solution.
2. Demonstrate leadership by contributing to the body of knowledge related to the discipline area and participating in professional networks.
3. Communicate findings using written and oral methods to inform both internal and external workplace practicing professionals.
4. Critically reflect on self-performance and develop a plan for lifelong and professional learning.

n/a

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
1 - Portfolio - 100%	•	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
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 - Portfolio - 100%	∘	∘	∘	∘	∘	∘	∘	

Textbooks and Resources

Textbooks

ENRP20003

Prescribed

Guide to Research Projects for Engineering Students: Planning, Writing and Presenting
(2015)
Authors: Leong, E. C., Heah, C. L. H., & Ong, K. K. W.
CRC Press
US
Binding: Hardcover

Additional Textbook Information
This text is also available in Kindle edition. However, paper copies are still available at the CQUni Bookshop here

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

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

Teaching Contacts

Mohammad Rasul Unit Coordinator
m.rasul@cqu.edu.au

Schedule

Week 1 - 06 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Begin project implementation. Recap the planning report and continue research for implementation project.		Make an appointment with your supervisor to discuss the overall plan/strategy of completing project implementation.

Week 2 - 13 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Update literature review and revise methodology, if needed. Plan for data collection/measurement. Prepare experimental set-up if applicable.		Have a meeting with your supervisor to discuss about plan for data collection/measurement and analysis.

Week 3 - 20 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic

Continue with data collection/measurement/analysis, or simulation. Update introduction and literature review chapters for your report.		Progress report 1, Due on Friday of week 3 by midnight. **Submit your progress report 1** which basically your revised chapter 1 (Introduction) and chapter 2 (Literature Review) to your supervisor for feedback and discussion.

Week 4 - 27 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Continue with data collection/measurement/analysis. Update methodology chapter for your implementation report.		Have a meeting with your supervisor to discuss about updating methodology chapter and data collection/analysis.

Week 5 - 03 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Continue with data collection/measurement/analysis and updating methodology chapter for your implementation report.		Progress report 2, Due on Friday of week 5 by midnight. **Submit your progress report 2** which is basically updated methodology chapter and preliminary data analysis to your supervisor for feedback and discussion.

Vacation Week - 10 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - 17 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Continue research, prepare results and their respective interpretation and discussion. Outline whole implementation report.		Have meeting (face to face/ Skype/phone) with your supervisor to discuss outline of your report.

Week 7 - 24 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Continue with results, discussion and analysis, and simulation if any. Prepare results for discussion with supervisor. Start writing draft implementation report based on the outline you negotiated with your supervisor.		Progress report 3, Due on Friday of week 7 by midnight. **Submit your progress report 3** which should be on more in depth analysis of results including discussion to your supervisor for feedback and discussion.

Week 8 - 01 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Continue research and further develop draft implementation report.		Have meeting (face to face/ Skype/phone) with your supervisor to discuss if you need any interim feedback.

Week 9 - 08 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Complete draft report for submission to your supervisor for feedback.		Draft report, Due on Friday of week 9 by midnight. **Submit draft implementation report** to your academic supervisor for feedback. You will not be able to submit your final report until you have received feedback on your draft report and addressed into final report.

Week 10 - 15 May 2017		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
Continue writing/revising your draft.		Have meeting (face to face/ Skype/phone) with your supervisor to discuss about final report and addressing feedback on draft report.
Week 11 - 22 May 2017		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
Revise draft report by incorporating feedback from your supervisor. Prepare all the elements of implementation project folder.		Have meeting (face to face/ Skype/phone) with your supervisor for finalising and discussing final report and project folder and if there is any last minute feedback needed.
Week 12 - 29 May 2017		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
Review and finalise all the elements of implementation project forlder. You will have to submit your implementation folder by Friday of this week.		**Portfolio** Due: Week 12 Friday (2 June 2017) 11:45 pm AEST
Review/Exam Week - 05 Jun 2017		
Module/Topic	**Chapter**	**Events and Submissions/Topic**
Exam Week - 12 Jun 2017		
Module/Topic	**Chapter**	**Events and Submissions/Topic**

Assessment Tasks

1 Portfolio

Assessment Type
Portfolio

Task Description
Project Portfolio comprises of final report followed by **a few pages reflective paper** i.e. your reflection on your learning journey and achievement in project implementation. Omission of any of the compulsory items may result in Fail grade. Further information on each of the compulsory items is available on the Moodle web site of this unit.
This is an individual project. All the resources for the unit are available on the Moodle web page of this unit. There are no face-to-face lectures or tutorials for this unit. It is the student's responsibility to monitor progress, manage and drive the project, seek assistance if required and arrange a regular reporting/meeting schedule with their academic supervisor.
The report will be assessed based on your demonstrated ability. You should show that you have;
1. demonstrated a detailed technical knowledge of the project area and proficiency in all technical aspects of the project
2. developed the ability to think critically and to make sound judgement
3. demonstrated the ability to communicate effectively (e.g. engineering report).
4. presented well formatted and quality report.

PROGRESS REPORT

Assessment will be based on the quality of three progress reports submitted to supervisors.
You **must contact and communicate** with your supervisor regularly (email/skype/telephone/etc). If you fail to take responsibility and communicate with your Supervisor for more than four (4) weeks without prior arrangement, you may be asked to show cause why a grade of **FAIL** should not be given.
Progress reports **should be submitted on-line in Moodle**. Dates for submission of progress reports are specified in the study schedule. The Supervisor will assess your report based on your achievement in project, the quality of the reports and adherence to the schedule. Each progress report should present important issues and problems you faced, major decisions made, your progress over the past period and planned activities for the following period.
Before any laboratory or workshop activities (if applicable) commence, or **before** any materials are brought to the University for construction or testing purposes, students are required to prepare project work plans and **conduct risk**

assessments in line with the University policy documents. Failure to comply with this requirement will result in a **FAIL**.

DRAFT REPORT

In Week 9, you must provide your Supervisor with a draft version of your report for feedback. It should be submitted on-line into Moodle. You will not be able to submit your final report unless you have addressed supervisor's feedback into your final report.

REPORT LAYOUT

Title page

Title

School name

Student name and student number

Supervisor’s name

Unit code and name The Term and Year of unit enrollment.

Executive summary

No more than two pages giving an overview of the project objectives, thesis content and results.

Acknowledgements (if any)

Table of contents
List of figures
List of tables
Nomenclature (if any)
Introduction

Background into the project including the rationale supporting the need to undertake it and defining the objectives and scopes of the study.

Literature review

A literature review is an account of IMPORTANT information has been published on topics related to your project by recognised scholars, workers and researchers. Quality is more important than quantity. You should identify the important sources of information, and explain why you place your confidence in them. It is part of the introduction to your report. In writing the literature review, your purpose is to convey to your reader what knowledge and ideas have been established on a topic, and what you perceive to be their strengths and weaknesses. As a piece of writing, the literature review must be defined by your project objective. It is not just a descriptive list of the material available or a set of summaries of any published articles. Besides enlarging your knowledge about the topic, writing a literature review lets you gain and demonstrate skills in two areas, namely information seeking and critical appraisal.

Information seeking*:* the ability to scan the literature efficiently, using manual or computerised methods, to identify a set of useful articles and books

C***ritical appraisal****:* the ability to apply principles of analysis to identify unbiased and valid studies.

A literature review should be organised around and related directly to the project you are developing, it should synthesize results into a summary of what is and is not known, identify areas of controversy in the literature, and it should identify or recommend a best method of approach to

solving the project objective.

Methodology

A detailed description of the work that you have performed.

Results and Discussion

This section is most important for your report. You need to clearly discuss and explain results obtained with their correct interpretation, and graphs and tables.

Conclusions and Recommendations

Findings and outcomes of the implementation work, and some recommendations for further study should be provided here.

References

Assessment Due Date
Week 12 Friday (2 June 2017) 11:45 pm AEST

Portfolio.

Return Date to Students
Exam Week Friday (16 June 2017)

Weighting
100%

Minimum mark or grade
50%

Assessment Criteria
An Assessment Criteria Sheet and information regarding requirements for each compulsory item is available on the Moodle web site page of this unit. The Assessment Criteria Sheet documents the level of achievement required to achieve "Acceptable", "Good" or "Excellent" ratings for each Learning Outcome. A rubric for awarding grades based on the levels of Acceptable, Good and Excellent is included in the Assessment Criteria sheet.

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
Plagiarism is unacceptable.

assessmentOutcome

- Analyse and synthesise information gathered in order to develop a sustainable and socially responsible 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.
- Critically reflect on self-performance and develop a plan for lifelong and professional learning.

assessmentGradAttribute

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