



ENRP20001 Engineering Research Project Planning Term 1 - 2019

Profile information current as at 21/04/2024 12:06 am

All details in this unit profile for ENRP20001 have been officially approved by CQU University 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 specifically designed so that students can apply the processes of research investigation through the analysis of, reflection on and critique of, an area of their professional practice. The unit uses a problem-based learning approach within an authentic workplace learning environment. This ensures students are undertaking an investigation that is relevant to the needs of industry. Students will apply an appropriate research methodology that suits their research problem. At the end of this unit, students will have developed a project plan that they will implement in the follow-on unit Engineering Research Project Implementation.

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

Students must have completed a minimum of 36 credit points and approval of head of course or delegate is required. Students must have a project topic and academic supervisor before they can be enrolled.

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

- Melbourne
- Mixed Mode
- 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: 10%

2. **Literature Review or Systematic Review**

Weighting: 20%

3. **Presentation**

Weighting: 20%

4. **Portfolio**

Weighting: 50%

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

Feedback

Due to significant increase in enrollments it was hard to find projects for all students.

Recommendation

Work with supervisors and Discipline Leaders to develop enough projects prior to start of term. Encourage students to develop their own project topics.

Feedback from Unit Evaluation: Students

Feedback

Some students prefer to develop their own project topics.

Recommendation

Support students to develop suitable projects.

Feedback from Unit Evaluation: Students

Feedback

Students did not receive the support expected from the supervisors.

Recommendation

Academic Supervisors and students will be encourage to have regular meetings.

Unit Learning Outcomes

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

1. Identify a suitable problem related to the study discipline
2. Develop a research question including identifying key words
3. Conduct an indepth review of related literature
4. Select an appropriate research methodology to investigate the problem
5. Regularly communicate professionally with all stakeholders in formal and informal reports
6. Professionally present the project plan in a seminar and defend the methodology adopted.

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 - 10%	•	•				
2 - Literature Review or Systematic Review - 20%			•			
3 - Presentation - 20%				•		•

Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	6
4 - Portfolio - 50%	•	•	•	•	•	

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 - 10%	○	○	○	○				
2 - Literature Review or Systematic Review - 20%	○	○		○				
3 - Presentation - 20%	○	○	○	○		○		
4 - Portfolio - 50%	○	○	○	○		○		

Textbooks and Resources

Textbooks

ENRP20001

Prescribed

GUIDE to RESEARCH PROJECTS for ENGINEERING STUDENTS: Planning, Writing and Presenting

Edition: 2016 / any (2016)

Authors: Eng-Choon Leong, Carmel Lee-Hsia Heah, Kenneth Keng Wee Ong -

CRC Press

London , Britain , UK

ISBN: 978-1-4822-3877-8

Binding: Paperback

Additional Textbook Information

Copies can be purchased from the CQUni Bookshop here: <http://bookshop.cqu.edu.au> (search on the Unit code)

[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 styles below:

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

For further information, see the Assessment Tasks.

Teaching Contacts

Abdul Mazid Unit Coordinator

a.mazid@cqu.edu.au

Schedule

Week 1: Enrolment and Research Project Selection - 11 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none">• Introduction to the unit, on-going assessment items• Enrolment requirement, choosing a project and supervisor		Complete your enrolment

Week 2: Research Topic Selection and Introduction - 18 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none">• Finalise research topic selection.• What is Research? Purpose of Research, Essential Aspects of Research, Scope of ENRP20001 and ENRP20003.• Research Proposal		Finalise enrolment by the end of Week 2

Week 3: Research Project Proposal - 25 Mar 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> Major Types of Research Introduction to Literature Review Research Proposal Content and Preparation, Examples 	Chapter 5	

Week 4: Research Project Proposal (Contd.) - 01 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> Research Project Proposal Preparation and Examples Content of Research Proposal Literature Review, Referencing Style 	Chapter 6	Project Proposal / Scope - 10% (Minimum Marks required 25%) Due: Week 4 Friday (5 Apr 2019) 11:45 pm AEST

Week 5: Literature Review Technique - 08 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> Review of Engineering Databases: types of documents, peer reviewed conferences, journals, books, standards. Quality Referencing 	Chapter 13 Chapter 18	

Vacation Week - 15 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> Keep working on your project and prepare literature review 		Residential School for Distance Education students: Monday - Tuesday (15 - 16 April 2019)

Week 6: Literature Review (Contd.) - 22 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> Typical Content of Literature Review, Typical Content of a Thesis, Examples. Research Methodology 	Chapter 13	

Week 7: Research Methodology Development - 29 Apr 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> Writing Draft Methodology, Content of it Effective Presentation Technique. Guest Lecture on Referencing Styles 	Chapters 7 and 14	Invited Guest Lecture (Subjected to confirmation) Literature Review - 20% Due: Week 7 Friday (3 May 2019) 11:45 pm AEST

Week 8: Methodology Presentation and Skills - 06 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> Content and Examples of Draft Methodology Presentation documents Presentation style and technique 	Chapters 22 and 23	

Week 9: Research Methodology (Contd.) - 13 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> Writing Draft Methodology Research activities and planning Gantt Chart 	Chapter 14	Presentation - 20% Due: Week 9 Friday (17 May 2019) 11:45 pm AEST

Week 10: Draft Methodology Presentation - 20 May 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> Draft Methodology Presentation Sessions for the whole day 		Draft Methodology Presentation Sessions: Mechanical, Civil and Electrical (To be announced)

Week 11: Conclusion Writing and Project Planning - 27 May 2019

Module/Topic	Chapter	Events and Submissions/Topic

- Conclusion writing technique
 - Project Planning Gantt Chart preparation
 - Planning Thesis Content, Preparation and Examples
- Chapter 6

Week 12: Planning Portfolio Review - 03 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> • Review of Draft Portfolio, Review of Overall Progress • Submit your Planning Portfolio (Planning Thesis and Methodology Presentation Document) 		<p>Planning Thesis - 50% (Minimum Marks required 50%) Due: Week 12 Friday (7 June 2019) 11:45 pm AEST</p>

Review/Exam Week - 10 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic
<ul style="list-style-type: none"> • No examination in ENRP20001 		

Exam Week - 17 Jun 2019

Module/Topic	Chapter	Events and Submissions/Topic

Term Specific Information

Assessment Tasks

1 Project Proposal / Scope - 10% (Minimum Marks required 25%)

Assessment Type

Report

Task Description

Write a Project Proposal clearly, study enough number of literature relevant to your project, provide introduction and literature findings, basic understanding of the research problem, rational, deliverable, stakeholder/s, list of references and other information required.

Lectures on Project Proposal and relevant topics will be given and it is crucial that you attend and attend all weekly meetings with supervisor.

Assessment Due Date

Week 4 Friday (5 Apr 2019) 11:45 pm AEST

Return Date to Students

Week 5 Friday (12 Apr 2019)

Weighting

10%

Minimum mark or grade

25%

Assessment Criteria

Appropriate title page, introduction and scope, aim and objectives, equipment and tools required and others are the major assessable portions of the Project Proposal document. Detailed Assessment Criteria will be available in Unit Moodle site in Week 3.

Referencing Style

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

Submission

Online

Submission Instructions

Submit MS Word file (Name the file as: ProjectProposal_ENRP20001_your last name)

Learning Outcomes Assessed

- Identify a suitable problem related to the study discipline
- Develop a research question including identifying key words

Graduate Attributes

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

2 Literature Review - 20%

Assessment Type

Literature Review or Systematic Review

Task Description

Conduct an indepth review on topic related literature, produce literature review chapter, reference the used publications correctly, identify research gap, set an aim and objectives. Relevant lectures will be given and it is crucial that you attend all lecture classes and all weekly meetings with supervisor.

Assessment Due Date

Week 7 Friday (3 May 2019) 11:45 pm AEST

Return Date to Students

Week 9 Friday (17 May 2019)

The dissertation should be returned to students within two weeks, however the process of external review may delay the final result.

Weighting

20%

Assessment Criteria

Appropriate title page, aim and objectives, review of enough number of relevant publications and critical analysis of findings, research problem identification and appropriate referencing. Acceptable English language skill is factor and poor English may cause reduced marks. Detailed Assessment Criteria will be available in Unit Moodle site in Week 5.

Referencing Style

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

Submission

Online

Submission Instructions

Submit MS Word file (Name the document as: LiteratureReview_ENRP20001_Your last name)

Learning Outcomes Assessed

- Conduct an indepth review of related literature

Graduate Attributes

- Knowledge
- Communication
- Research

3 Presentation - 20%

Assessment Type

Presentation

Task Description

Students are required to do a 10-minute presentation focussing mainly on project methodology. Prepare PowerPoint presentation document, presentation time is 10 mins and 2 mins for questions and answers. Attend all lecture classes and weekly meetings with supervisor.

Assessment Due Date

Week 9 Friday (17 May 2019) 11:45 pm AEST

Return Date to Students

Week 11 Friday (31 May 2019)

Weighting

20%

Assessment Criteria

Aim and objective, depth of literature review, appropriateness of proposed methodology, presentation style and skills and answering questions are the major assessable items. Detailed Assessment Criteria will be available in Unit Moodle site in Week 7.

Referencing Style

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

Submission

Online

Submission Instructions

Submit PowerPoint document (Name the document as: MethodologyPPT_ENRP20001_your last name)

Learning Outcomes Assessed

- Select an appropriate research methodology to investigate the problem
- Professionally present the project plan in a seminar and defend the methodology adopted.

Graduate Attributes

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

4 Planning Thesis - 50% (Minimum Marks required 50%)

Assessment Type

Portfolio

Task Description

Follow content of a typical planning thesis provided in lecture classes, it is essential that you attend all lecture classes and weekly meetings with supervisor.

Essential parts of a Planning Thesis are title page, aim and objective, introduction and literature review chapter, proposed methodology, conclusion and list references.

Assessment Due Date

Week 12 Friday (7 June 2019) 11:45 pm AEST

Return Date to Students

Review/Exam Week Friday (14 June 2019)

Weighting

50%

Minimum mark or grade

50%

Assessment Criteria

Essential assessable parts of a Planning Thesis are appropriate title page, aim and objective, depth and clarity of introduction and literature review sections, suitability and fulfilment of proposed methodology and others relevant. Detailed Assessment Criteria will be available in Unit Moodle site in Week 8.

Referencing Style

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

Submission

Online

Submission Instructions

Submit MS Word document (Name the document as: PlanningThesis_ENRP20001_your last name)

Learning Outcomes Assessed

- Identify a suitable problem related to the study discipline
- Develop a research question including identifying key words
- Conduct an indepth review of related literature
- Select an appropriate research methodology to investigate the problem
- Regularly communicate professionally with all stakeholders in formal and informal reports

Graduate Attributes

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

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