



BLCN14039 *Infrastructure Planning*

Term 3 - 2019

Profile information current as at 01/05/2024 03:06 pm

All details in this unit profile for BLCN14039 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

The unit introduces students to the principles and practices of infrastructure planning. Topics to be studied include infrastructure evaluation strategies, risk management, environmental and social impacts of infrastructure projects, financial concepts to assess project viability, contractual and participation relationships, management structures and sustainability of projects. Project case studies will be used to support student learning.

Details

Career Level: *Undergraduate*

Unit Level: *Level 4*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

There are no requisites for 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 3 - 2019

- 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 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. **Written Assessment**

Weighting: 5%

2. **Written Assessment**

Weighting: 20%

3. **Written Assessment**

Weighting: 5%

4. **Written Assessment**

Weighting: 25%

5. **Written Assessment**

Weighting: 5%

6. **Presentation and Written Assessment**

Weighting: 40%

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 Survey

Feedback

The unit course material was clearly explained and any questions were answered either at the Zoom session or via email promptly.

Recommendation

Ensure that the lecturer's availability is maintained throughout the term. Continue to engage highly committed and experienced lecturers with industry backgrounds.

Unit Learning Outcomes

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

1. Evaluate infrastructure projects, their risks and uncertainties
2. Explain environmental and social impacts on infrastructure projects
3. Apply financial concepts to project selection and viability
4. Assess contractual relationships and participation strategies
5. Discuss the management of infrastructure projects
6. Apply knowledge of infrastructure management to a case study
7. Prepare an infrastructure project report

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	7
1 - Written Assessment - 5%	•					•	
2 - Written Assessment - 20%	•					•	
3 - Written Assessment - 5%		•				•	
4 - Written Assessment - 25%			•			•	
5 - Written Assessment - 5%		•	•	•		•	
6 - Presentation and Written Assessment - 40%	•	•	•	•	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes						
	1	2	3	4	5	6	7
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 - Written Assessment - 5%	•	•	•	•		•		•		
2 - Written Assessment - 20%	•	•	•	•		•		•		
3 - Written Assessment - 5%	•	•	•	•		•		•		
4 - Written Assessment - 25%	•	•	•	•		•		•		
5 - Written Assessment - 5%	•	•	•	•		•		•		
6 - Presentation and Written Assessment - 40%	•	•	•	•		•		•		

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: [Harvard \(author-date\)](#)
For further information, see the Assessment Tasks.

Teaching Contacts

Bill Zhao Unit Coordinator
b.zhao@cqu.edu.au

Schedule

Week 1 - 11 Nov 2019

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Infrastructure Planning		

Week 2 - 18 Nov 2019

Module/Topic	Chapter	Events and Submissions/Topic
Project evaluation and risk management		A1 Short Written Response Due: Week 2 Tuesday (19 Nov 2019) 11:45 pm AEST

Week 3 - 25 Nov 2019

Module/Topic	Chapter	Events and Submissions/Topic
Project evaluation and risk management (continued)		

Week 4 - 02 Dec 2019

Module/Topic	Chapter	Events and Submissions/Topic
Environmental and social impacts		A2 Written Assessment Due: Week 4 Tuesday (3 Dec 2019) 11:45 pm AEST

Vacation Week - 09 Dec 2019

Module/Topic	Chapter	Events and Submissions/Topic
--------------	---------	------------------------------

Week 5 - 16 Dec 2019

Module/Topic	Chapter	Events and Submissions/Topic
Environmental and social impacts (continued)		

Week 6 - 23 Dec 2019

Module/Topic	Chapter	Events and Submissions/Topic
Financial concepts and strategies		A3 Short Written Response Due: Week 6 Tuesday (24 Dec 2019) 11:45 pm AEST

Week 7 - 06 Jan 2020

Module/Topic	Chapter	Events and Submissions/Topic
Financial concepts and strategies (continued)		

Week 8 - 13 Jan 2020

Module/Topic	Chapter	Events and Submissions/Topic
--------------	---------	------------------------------

Infrastructure relationships and contracts

A4 Written Assessment Due: Week 8 Tuesday (14 Jan 2020) 11:45 pm AEST

Week 9 - 20 Jan 2020

Module/Topic	Chapter	Events and Submissions/Topic
Infrastructure relationships and contracts (continued)		

Week 10 - 27 Jan 2020

Module/Topic	Chapter	Events and Submissions/Topic
Managing infrastructure projects		A5 Short Written Response Due: Week 10 Tuesday (28 Jan 2020) 11:45 pm AEST

Week 11 - 03 Feb 2020

Module/Topic	Chapter	Events and Submissions/Topic
Managing infrastructure projects (continued)		

Week 12 - 10 Feb 2020

Module/Topic	Chapter	Events and Submissions/Topic
International projects and sustainability		

Exam Week - 17 Feb 2020

Module/Topic	Chapter	Events and Submissions/Topic
		A6 Written Assessment and presentation Due: Exam Week Tuesday (18 Feb 2020) 11:45 pm AEST

Assessment Tasks

1 A1 Short Written Response

Assessment Type

Written Assessment

Task Description

This assessment relates to unit learning outcomes 1 and 6. Assessment task 1 will require you to research and answer a question that explores common infrastructure planning concepts. Late submissions will be penalised by 5% per day on the assignment total value.

Assessment Due Date

Week 2 Tuesday (19 Nov 2019) 11:45 pm AEST

Return Date to Students

Week 4 Monday (2 Dec 2019)

Within 2 weeks of submission.

Weighting

5%

Minimum mark or grade

Obtain an overall mark of 50% AND pass the three short response assessments (A1, A3, A5) with a mark of 7.5/15 AND obtain a mark of at least 40% for Assessment A6

Assessment Criteria

This assessment relates to course learning outcomes 1 and 6. Assessment task 1 will require you to research and answer a question that explores infrastructure planning concepts.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. The length of this assignment is determined by sketches, brief response answers and worked calculations as required, consequently there is not prescribed word limit for this assessment task.

Your assignment should be produced in electronic format either as

- a single word-processed document, or
- a single pdf format document.

All submissions should be submitted through the assessment link in Moodle, by uploading your file following the on-screen instructions.

Note: that all submissions are processed through the similarity detection software (called Turnitin)

You must ensure that all of the work is your own, in line with University requirements.

Note: you will find further support material for this assignment on the Moodle site for this course

The assignment will be assessed on the following basis:

- Clarity of expression and comprehensive coverage of issues
- Use of quality supporting documentation as appropriate
- Use of original thought and content
- Proper use of the Harvard referencing style
- Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication.
- Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Referencing Style

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

Submission

Online

Submission Instructions

Please refer to the Moodle site for specific assessment submission criteria.

Learning Outcomes Assessed

- Evaluate infrastructure projects, their risks and uncertainties
- Apply knowledge of infrastructure management to a case study

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice

2 A2 Written Assessment

Assessment Type

Written Assessment

Task Description

This assessment relates to unit learning outcomes 1 and 6. Assessment task 2 will require you to research and answer questions that explores infrastructure planning concepts. Late submissions will be penalised by 5% per day on the assignment total value.

Assessment Due Date

Week 4 Tuesday (3 Dec 2019) 11:45 pm AEST

Return Date to Students

Week 5 Tuesday (17 Dec 2019)

Within 2 weeks of submission.

Weighting

20%

Assessment Criteria

This assessment relates to course learning outcomes 1 and 6. Assessment task 2 will require you to research and answer questions that explores infrastructure planning concepts.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity.

The length of this assignment is determined by sketches, brief response answers and worked calculations as required, consequently there is not prescribed word limit for this assessment task.

Your assignment should be produced in electronic format either as

- a single word-processed document, or
- a single pdf format document.

All submissions should be submitted through the assessment link in Moodle, by uploading your file following the on-screen instructions.

Note: that all submissions are processed through the similarity detection software (called Turnitin)

You must ensure that all of the work is your own, in line with University requirements.

Note: you will find further support material for this assignment on the Moodle site for this course

The assignment will be assessed on the following basis:

- Clarity of expression and comprehensive coverage of issues
- Use of quality supporting documentation as appropriate
- Use of original thought and content
- Proper use of the Harvard referencing style
- Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication.
- Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Referencing Style

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

Submission

Online

Submission Instructions

Please refer to the Moodle site for specific assessment submission criteria.

Learning Outcomes Assessed

- Evaluate infrastructure projects, their risks and uncertainties
- Apply knowledge of infrastructure management to a case study

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice

3 A3 Short Written Response

Assessment Type

Written Assessment

Task Description

This assessment relates to unit learning outcomes 2 and 6. Assessment task 3 will require you to research and answer a question that explores infrastructure planning concepts.

Late submissions of assignment A3 will be penalised by 5% per day on the assignment total value.

Assessment Due Date

Week 6 Tuesday (24 Dec 2019) 11:45 pm AEST

Return Date to Students

Week 8 Tuesday (14 Jan 2020)

Within 2 weeks of submission.

Weighting

5%

Minimum mark or grade

Obtain an overall mark of 50% AND pass the three short response assessments (A1, A3, A5) with a mark of 7.5/15 AND

obtain a mark of at least 40% for Assessment A6

Assessment Criteria

This assessment relates to course learning outcomes 2 and 6. Assessment task 3 will require you to research and answer a question that explores infrastructure planning concepts.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. The length of this assignment is determined by sketches, brief response answers and worked calculations as required, consequently there is not prescribed word limit for this assessment task.

Your assignment should be produced in electronic format either as

- a single word-processed document, or
- a single pdf format document.

All submissions should be submitted through the assessment link in Moodle, by uploading your file following the on-screen instructions.

Note: that all submissions are processed through the similarity detection software (called Turnitin)

You must ensure that all of the work is your own, in line with University requirements.

Note: you will find further support material for this assignment on the Moodle site for this course

The assignment will be assessed on the following basis:

- Clarity of expression and comprehensive coverage of issues
- Use of quality supporting documentation as appropriate
- Use of original thought and content
- Proper use of the Harvard referencing style
- Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication.
- Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Referencing Style

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

Submission

Online

Submission Instructions

Please refer to the Moodle site for specific assessment submission criteria.

Learning Outcomes Assessed

- Explain environmental and social impacts on infrastructure projects
- Apply knowledge of infrastructure management to a case study

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice

4 A4 Written Assessment

Assessment Type

Written Assessment

Task Description

This assessment relates to unit learning outcomes 3 and 6. Assessment task 4 will require you to research and answer questions that explores infrastructure planning concepts. Late submissions will be penalised by 5% per day on the assignment total value.

Assessment Due Date

Week 8 Tuesday (14 Jan 2020) 11:45 pm AEST

Return Date to Students

Week 10 Tuesday (28 Jan 2020)

Within 2 weeks of submission.

Weighting

25%

Assessment Criteria

This assessment relates to course learning outcomes 3 and 6. Assessment task 4 will require you to research and answer a question that explores infrastructure planning concepts.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. The length of this assignment is determined by sketches, brief response answers and worked calculations as required, consequently there is not prescribed word limit for this assessment task.

Your assignment should be produced in electronic format either as

- a single word-processed document, or
- a single pdf format document.

All submissions should be submitted through the assessment link in Moodle, by uploading your file following the on-screen instructions.

Note: that all submissions are processed through the similarity detection software (called Turnitin)

You must ensure that all of the work is your own, in line with University requirements.

Note: you will find further support material for this assignment on the Moodle site for this course

The assignment will be assessed on the following basis:

- Clarity of expression and comprehensive coverage of issues
- Use of quality supporting documentation as appropriate
- Use of original thought and content
- Proper use of the Harvard referencing style
- Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication.
- Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Referencing Style

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

Submission

Online

Submission Instructions

Please refer to the Moodle site for specific assessment submission criteria.

Learning Outcomes Assessed

- Apply financial concepts to project selection and viability
- Apply knowledge of infrastructure management to a case study

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice

5 A5 Short Written Response

Assessment Type

Written Assessment

Task Description

This assessment relates to unit learning outcomes 2,3,4 and 6. Assessment task 5 will require you to research and answer a question that explores infrastructure planning concepts. Late submissions will be penalised by 5% per day on the assignment total value.

Assessment Due Date

Week 10 Tuesday (28 Jan 2020) 11:45 pm AEST

Return Date to Students

Week 12 Tuesday (11 Feb 2020)

Within two weeks of submission

Weighting

5%

Minimum mark or grade

Obtain an overall mark of 50% AND pass the three short response assessments (A1, A3, A5) with a mark of 7.5/15 AND obtain a mark of at least 40% for Assessment A6

Assessment Criteria

This assessment relates to course learning outcomes 2,3,4 and 6. Assessment task 5 will require you to research and answer a question that explores infrastructure planning concepts.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. The length of this assignment is determined by sketches, brief response answers and worked calculations as required, consequently there is not prescribed word limit for this assessment task.

Your assignment should be produced in electronic format either as

- a single word-processed document, or
- a single pdf format document.

All submissions should be submitted through the assessment link in Moodle, by uploading your file following the on-screen instructions.

Note: that all submissions are processed through the similarity detection software (called Turnitin)

You must ensure that all of the work is your own, in line with University requirements.

Note: you will find further support material for this assignment on the Moodle site for this course

The assignment will be assessed on the following basis:

- Clarity of expression and comprehensive coverage of issues
- Use of quality supporting documentation as appropriate
- Use of original thought and content
- Proper use of the Harvard referencing style
- Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication.
- Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Referencing Style

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

Submission

Online

Submission Instructions

refer to Moodle for instructions

Learning Outcomes Assessed

- Explain environmental and social impacts on infrastructure projects
- Apply financial concepts to project selection and viability
- Assess contractual relationships and participation strategies
- Apply knowledge of infrastructure management to a case study

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology Competence
- Ethical practice

6 A6 Written Assessment and presentation

Assessment Type

Presentation and Written Assessment

Task Description

This assessment relates to unit learning outcomes 1 to 7. Assessment task 6 will require you to research and answer questions that explores infrastructure planning concepts and present a report to the rest of the class. Late submissions will be penalised by 5% per day on the assignment total value.

Assessment Due Date

Exam Week Tuesday (18 Feb 2020) 11:45 pm AEST

Return Date to Students

Exam Week Friday (21 Feb 2020)

Two weeks after the due date of the assessment.

Weighting

40%

Minimum mark or grade

Obtain an overall mark of 50% AND pass the three short response assessments (A1, A3, A5) with a mark of 7.5/15 AND obtain a mark of at least 40% for Assessment A6

Assessment Criteria

This assessment relates to course learning outcomes 1 to 7. Assessment task 6 will require you to research and answer questions that explores infrastructure planning concepts and present a report to the rest of the class.

As with all assessments, formatting and presentation is really important, technical accuracy and referencing where required is paramount with an overarching requirement for demonstrating your answer / submission / design with clarity. The length of this assignment is determined by sketches, brief response answers and worked calculations as required, consequently there is not prescribed word limit for this assessment task.

Your assignment should be produced in electronic format either as

- a single word-processed document, or
- a single pdf format document.

All submissions should be submitted through the assessment link in Moodle, by uploading your file following the on-screen instructions.

Note: that all submissions are processed through the similarity detection software (called Turnitin)

You must ensure that all of the work is your own, in line with University requirements.

Note: you will find further support material for this assignment on the Moodle site for this course

The assignment will be assessed on the following basis:

- Clarity of expression and comprehensive coverage of issues
- Use of quality supporting documentation as appropriate
- Use of original thought and content
- Proper use of the Harvard referencing style
- Overall presentation and ability to communicate using correct spelling, grammar and punctuation and the use of appropriate diagrams and other visual communication.
- Demonstration of core knowledge and demonstration of appropriate application of knowledge.

Referencing Style

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

Submission

Online

Submission Instructions

refer to Moodle for instructions

Learning Outcomes Assessed

- Evaluate infrastructure projects, their risks and uncertainties
- Explain environmental and social impacts on infrastructure projects
- Apply financial concepts to project selection and viability
- Assess contractual relationships and participation strategies
- Discuss the management of infrastructure projects
- Apply knowledge of infrastructure management to a case study
- Prepare an infrastructure project report

Graduate Attributes

- Communication

- Problem Solving
- Critical Thinking
- Information Literacy
- Information Technology 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