

EVST19021 *Sustainability Issues and Solutions*

Term 3 - 2025

Profile information current as at 11/04/2026 01:11 am

All details in this unit profile for EVST19021 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 impacts of human populations on the natural environment are well studied but little progress has been made to improve the sustainability of our lifestyle due to the complex interactions among social, economic and environmental imperatives. In Sustainability Issues and Solutions you will investigate the impact of human activities on a range of living and non-living, renewable and non-renewable natural resources. By applying 'Systems Thinking' you will practise developing solutions that are economically, socially and environmentally sustainable. On completion of this unit you will have a broad appreciation of the balances underpinning both temporal and spatial variation in sustainability and human efforts to control these.

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

Minimum of 72 credit points

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 - 2025

- 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. Group Discussion

Weighting: 10%

2. Written Assessment

Weighting: 20%

3. Written Assessment

Weighting: 40%

4. Written Assessment

Weighting: 30%

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 SUTE

Feedback

Assessments required significant effort but had relatively low weighting, and the number of short assessments made it challenging to present findings in depth.

Recommendation

Consider reducing the number of assessments while increasing their word limits and weighting to better reflect effort. Consider assessment timing.

Feedback from SUTE

Feedback

Some assessment instructions were unclear, and exemplars did not fully align with expectations, leading to confusion.

Recommendation

Ensure that instructions and exemplars are consistent and provide additional clarification where needed.

Feedback from SUTE

Feedback

Some resources felt outdated or not directly useful for assessments, and there was uncertainty about using lecture content in assignments.

Recommendation

Review and update materials where needed, clarify how lecture content can be used.

Unit Learning Outcomes

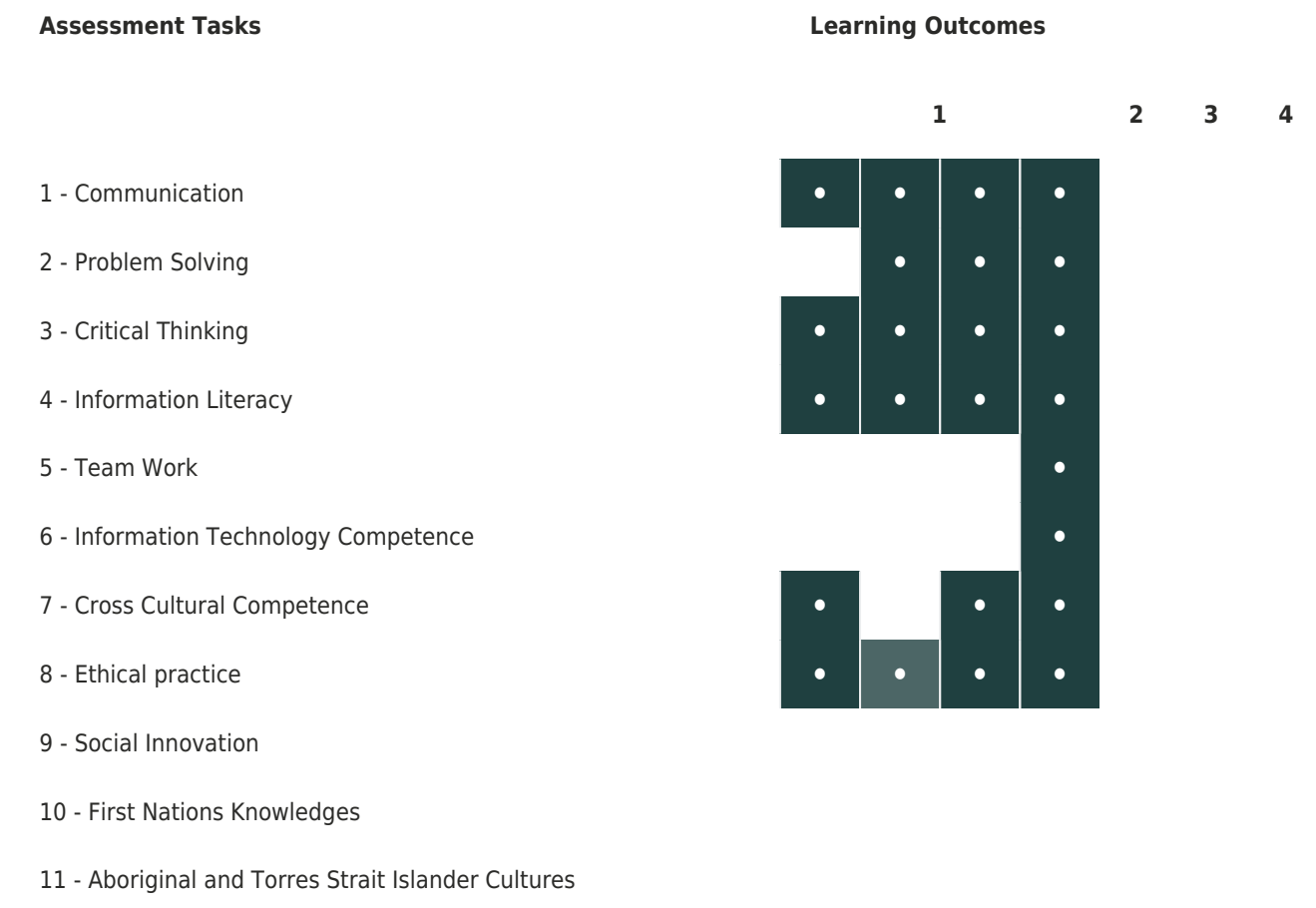
On successful completion of this unit, you will be able to:

1. Discuss the economic, ethical and ecological issues associated with the sustainable utilisation of the earth's renewable and non-renewable natural resources.
2. Explain the importance of systems thinking and an understanding of temporal and spatial scales and feedback loops in determining solutions to sustainable management of resources.
3. Discuss the shortcomings in our understanding and acceptance of the processes that lead to sustainability.
4. Develop a range of possible strategies that would help to ensure the sustainable utilisation of natural resources.

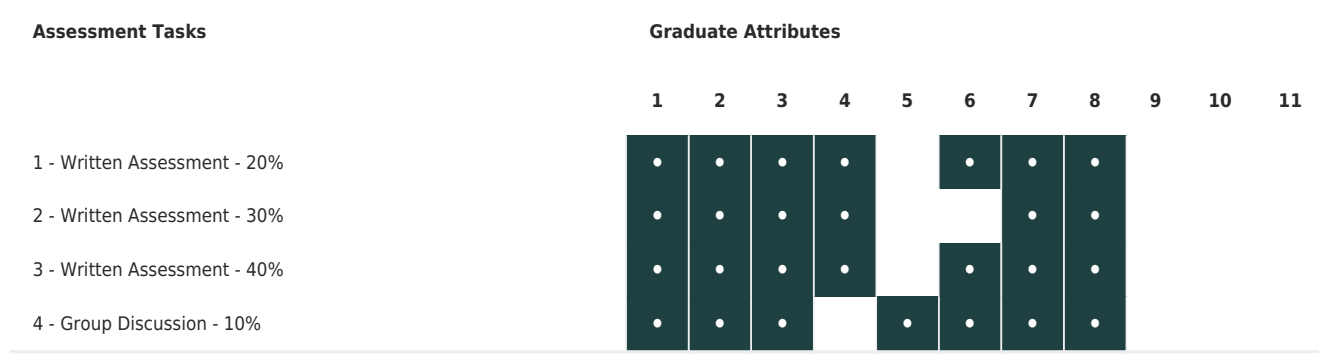
Alignment of Learning Outcomes, Assessment and Graduate Attributes



Alignment of Assessment Tasks to Learning Outcomes



Alignment of Assessment Tasks to Graduate Attributes



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)
- Word processing and presentation software capable of creating and exporting files in .docx and .pptx formats (e.g. Microsoft Word and PowerPoint or equivalent).

Referencing Style

All submissions for this unit must use the referencing style: Harvard (author-date)

For further information, see the Assessment Tasks.

Teaching Contacts

Amie Anastasi Unit Coordinator
a.anastasi@cqu.edu.au

Schedule

Week 1 - 10 Nov 2025

Module/Topic	Chapter	Events and Submissions/Topic
Sustainability concepts and systems thinking	Study Guide Chapter 1	

Week 2 - 17 Nov 2025

Module/Topic	Chapter	Events and Submissions/Topic
Ecological, economic and social measures of sustainability	Study Guide Chapter 2	

Week 3 - 24 Nov 2025

Module/Topic	Chapter	Events and Submissions/Topic
Biodiversity	Study Guide Chapter 3	Discussion Forum Due: Week 3 Monday (24 Nov 2025) 11:59 pm AEST

Week 4 - 01 Dec 2025

Module/Topic	Chapter	Events and Submissions/Topic
Water resources	Study Guide Chapter 4	

Week 5 - 08 Dec 2025

Module/Topic	Chapter	Events and Submissions/Topic
Food production systems	Study Guide Chapter 5	

Week 6 - 15 Dec 2025

Module/Topic	Chapter	Events and Submissions/Topic
Trees, carbon and climate change	Study Guide Chapter 6	Slide deck Due: Week 6 Friday (19 Dec 2025) 11:59 pm AEST

Vacation Week - 22 Dec 2025

Module/Topic	Chapter	Events and Submissions/Topic

Vacation Week - 29 Dec 2025		
Module/Topic	Chapter	Events and Submissions/Topic
Week 7 - 05 Jan 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Marine resources	Study Guide Chapter 7	
Week 8 - 12 Jan 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Energy systems	Study Guide Chapter 8	Case Study Analysis Due: Week 8 Friday (16 Jan 2026) 11:59 pm AEST
Week 9 - 19 Jan 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Waste management and the circular economy	Study Guide Chapter 9	
Week 10 - 26 Jan 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Population and sustainable development	Study Guide Chapter 10	
Week 11 - 02 Feb 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Urbanisation and transport	Study Guide Chapter 11	
Week 12 - 09 Feb 2026		
Module/Topic	Chapter	Events and Submissions/Topic
Cultural change and social innovation	Study Guide Chapter 12	Research Report Due: Week 12 Wednesday (11 Feb 2026) 11:59 pm AEST
Exam Week - 16 Feb 2026		
Module/Topic	Chapter	Events and Submissions/Topic

Term Specific Information

Use of Generative AI

This unit allows Level 4 AI use (Perkins, Furze, Roe & MacVaugh, 2024). You may use generative AI to assist with any part of the assessment process, provided you declare how it was used. You remain responsible for ensuring the accuracy, integrity, and originality of the submitted work. A brief AI declaration must be included with each assessment. See each task description for specific instructions.

Assessment Tasks

1 Discussion Forum

Assessment Type

Group Discussion

Task Description

Topic:

Who should decide what is 'sustainable' - scientists, policymakers, communities, or the market?

Word limit: 600 words (maximum)

Task Requirements:

This early discussion forum invites you to critically examine who should have the authority and responsibility to define and guide sustainability priorities, and how those decisions affect broader systems over time.

Should sustainability decisions be driven primarily by scientific expertise, political leadership, community values, or market forces? Or should these groups share responsibility? And if so, how?

As you develop your post, consider how decisions made by different groups might shape ecological, social, and economic systems at different temporal and spatial scales, and how feedbacks may influence future sustainability outcomes.

You are required to post at least one contribution to the discussion forum (maximum 600 words). Your post should:

- Take a clear position, supported by relevant references.
- Use concise and respectful language.
- Either initiate a new discussion thread or respond thoughtfully to an existing post.
- If responding to others, extend or challenge ideas constructively using evidence to support your view.

Level of GenAI use allowed:

Level 4: You may use AI extensively throughout your work either as you wish, or as specifically directed in your assessment. Focus on directing AI to achieve your goals while demonstrating your critical thinking.

AI Declaration:

You must include a brief AI use declaration at the end of your forum post. This should state whether and how you used generative AI tools to complete the task.

For example:

"I used ChatGPT to help generate an outline and refine the language in my forum post. All analysis and conclusions are my own."

"I did not use generative AI in the preparation of this assessment."

Assessment Due Date

Week 3 Monday (24 Nov 2025) 11:59 pm AEST

Return Date to Students

Week 5 Friday (12 Dec 2025)

Weighting

10%

Assessment Criteria

Your forum post will be assessed on the following:

- Relevance to the Topic (2 marks)
- Evidence of Critical Thinking (2 marks)
- Clarity of Arguments (2 marks)
- Conciseness and adherence to word limit (1 mark)
- Grammar and Spelling (1 mark)
- Appropriate References (2 marks)

Referencing Style

- Harvard (author-date)

Submission

Online

Submission Instructions

Post to a forum on Moodle.

Learning Outcomes Assessed

- Discuss the economic, ethical and ecological issues associated with the sustainable utilisation of the earth's renewable and non-renewable natural resources.
- Explain the importance of systems thinking and an understanding of temporal and spatial scales and feedback loops in determining solutions to sustainable management of resources.

Graduate Attributes

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

2 Slide deck

Assessment Type

Written Assessment

Task Description

Topic:

Can technology solve the global water crisis?

Slide limit: 15 slides (including title and references)

Speaker Notes: 1000–1500 words (total across slides)

Task Requirements:

For this assessment, you will create a PowerPoint slide deck with detailed speaker notes exploring the role of technology in addressing the global water crisis. Your presentation should examine both the potential and limitations of technological solutions (such as desalination, water recycling, precision irrigation, and monitoring technologies) within a broader sustainability context.

The slide deck should be designed for an informed lay audience, using clear language and minimal jargon. Your task is to make complex sustainability issues accessible and engaging.

Slide Deck Content:

- Maximum of 15 slides, including title and reference slides.
- No more than 7 bullet points or 30 words per slide.

Speaker Notes:

- Bullet-point format, 1000–1500 words total across all slides.
- Use the notes section to elaborate on slide points with explanations, examples, and references.

Presentation Style:

- Clear, concise language aimed at an informed lay audience.
- You are not required to present or narrate the slides.

Level of GenAI use allowed:

Level 4: You may use AI extensively throughout your work either as you wish, or as specifically directed in your assessment. Focus on directing AI to achieve your goals while demonstrating your critical thinking.

AI Declaration

You must include a brief AI use declaration on the final slide of your presentation. This should state whether and how you used generative AI tools to complete the task.

For example:

"I used ChatGPT to help organise the structure of my presentation and refine language in my speaker notes. All analysis and conclusions are my own."

"I did not use generative AI in the preparation of this assessment."

Assessment Due Date

Week 6 Friday (19 Dec 2025) 11:59 pm AEST

Return Date to Students

Week 9 Friday (23 Jan 2026)

Weighting

20%

Minimum mark or grade

50%

Assessment Criteria

Your slide deck will be assessed on:

- Clarity of Presentation (4 marks): Logical organization of issues, effective use of visuals, and overall clarity in communicating ideas.
- Application of Science and Sustainability Principles (5 marks): Integration of relevant scientific concepts and sustainability principles, demonstrating understanding of their interconnections.
- Comprehensive Coverage of Relevant Issues (4 marks): Thoroughness and depth in addressing key aspects of water scarcity and food security.
- Use of Valid Information Sources (4 marks): Accuracy of reference details and reliability of sources, encouraging diverse and credible references.
- Appropriateness of Language and Presentation (3 marks): Suitability of language, tone, and presentation style for the intended audience, ensuring engagement and clarity.

Referencing Style

- Harvard (author-date)

Submission

Online

Submission Instructions

Submit PowerPoint slides to Moodle

Learning Outcomes Assessed

- Discuss the economic, ethical and ecological issues associated with the sustainable utilisation of the earth's renewable and non-renewable natural resources.

- Discuss the shortcomings in our understanding and acceptance of the processes that lead to sustainability.

Graduate Attributes

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

3 Case Study Analysis

Assessment Type

Written Assessment

Task Description

Topic:

Transitioning to a circular economy: A case study of a sector, company, or region

Word limit: 2000 words ($\pm 10\%$)

Task Requirements:

This assessment requires you to undertake a case study analysis examining how a particular sector, company, or region is transitioning (or attempting to transition) to a circular economy. You should identify the drivers, strategies, and outcomes of the transition, as well as the opportunities and challenges involved.

You may choose your own case study, but it must be clearly defined and supported by credible data and sources. Your analysis should apply sustainability concepts and systems thinking to explore how environmental, economic, and social factors interact within the chosen context. You should also provide critical recommendations for how the transition could be improved or scaled up.

Level of GenAI use allowed:

Level 4: You may use AI extensively throughout your work either as you wish, or as specifically directed in your assessment. Focus on directing AI to achieve your goals while demonstrating your critical thinking.

AI Declaration

You must include a brief AI use declaration at the end of your written submission. This should state whether and how you used generative AI tools to complete the task.

For example:

"I used ChatGPT to help generate an outline and refine wording in sections of my case study. All analysis, case selection, and recommendations are my own."

"I did not use generative AI in the preparation of this assessment."

Assessment Due Date

Week 8 Friday (16 Jan 2026) 11:59 pm AEST

Return Date to Students

Week 11 Friday (6 Feb 2026)

Weighting

40%

Minimum mark or grade

50%

Assessment Criteria

- Research and Analysis (10 marks): Depth of research and use of relevant data or examples; quality of analysis regarding opportunities and challenges.
- Application of Concepts (10 marks): Clear application of sustainability concepts and systems thinking; demonstrates understanding of factor interactions.
- Critical Thinking and Recommendations (10 marks): Evaluation of transition feasibility; well-reasoned recommendations.
- Structure, Clarity, and Presentation (5 marks): Logical structure; clarity of writing; adherence to word limit.
- Referencing and Academic Integrity (5 marks): Accurate Harvard referencing; use of credible academic sources.

Referencing Style

- Harvard (author-date)

Submission

Online

Submission Instructions

Submit your Case Study to Moodle as a word document

Learning Outcomes Assessed

- Explain the importance of systems thinking and an understanding of temporal and spatial scales and feedback loops in determining solutions to sustainable management of resources.
- Develop a range of possible strategies that would help to ensure the sustainable utilisation of natural resources.

Graduate Attributes

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

4 Research Report

Assessment Type

Written Assessment

Task Description

Topic:

Designing climate-resilient cities: How can urban planning address future sustainability challenges?

Word limit: 1500 words ($\pm 10\%$)

Task Requirements:

In this final research report, you will critically examine how urban planning can address the sustainability challenges of future climate-resilient cities. Consider how population growth, infrastructure design, transport systems, energy use, and social equity interact in urban contexts, and analyse both challenges and opportunities for sustainable development.

Your report should:

- Introduce the concept of climate-resilient cities and why they matter.
- Analyse environmental, economic, and social sustainability challenges in urban areas.
- Discuss technological, infrastructural, and policy solutions for resilience.
- Include at least one case study of a city or region implementing climate-resilient strategies.
- Provide evidence-based recommendations for future urban planning.

Level of GenAI use allowed:

Level 4: You may use AI extensively throughout your work either as you wish, or as specifically directed in your assessment. Focus on directing AI to achieve your goals while demonstrating your critical thinking.

AI Declaration

You must include a brief AI use declaration at the end of your report. This should state whether and how you used generative AI tools to complete the task.

For example:

"I used ChatGPT to help summarise background literature and refine language in my report. All analysis, interpretation, and recommendations are my own."

"I did not use generative AI in the preparation of this assessment."

Assessment Due Date

Week 12 Wednesday (11 Feb 2026) 11:59 pm AEST

Return Date to Students

Exam Week Friday (20 Feb 2026)

Weighting

30%

Minimum mark or grade

50%

Assessment Criteria

- Research and Analysis (10 marks): Depth of research and quality of analysis of urban sustainability challenges and opportunities.
- Application of Concepts (8 marks): Effective use of sustainability and planning concepts; systems thinking applied to urban contexts.
- Case Study and Recommendations (6 marks): Relevant case study; thoughtful recommendations.
- Structure, Clarity, and Presentation (4 marks): Logical organisation, clarity, and professional presentation.
- Referencing and Academic Integrity (2 marks): Accurate Harvard referencing; use of credible academic sources.

Referencing Style

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

Submission

Online

Submission Instructions

Submit your Report to Moodle as a word document

Learning Outcomes Assessed

- Discuss the shortcomings in our understanding and acceptance of the processes that lead to sustainability.
- Develop a range of possible strategies that would help to ensure the sustainable utilisation of natural resources.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- 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