# ENEM13018 *Materials and Manufacturing*
## Term 2 - 2021

Profile information current as at 08/05/2024 01:22 am



## General Information

### Overview
This unit offers extended information on material behaviours and manufacturing properties, principles of manufacturing processes and technologies. The unit aims to deepen the understanding of the material selection process and enables you to identify appropriate manufacturing processes for a particular product design and development. You will study a wide variety of manufacturing processes such as bulk deformation processes, material removal processes, finishing and joining processes, micro/nano scale manufacturing, and other modern manufacturing techniques and learn product design, quality management, and manufacturing in a competitive environment. You will apply information literacy skills to obtain relevant engineering information and identify appropriate standards and practices.

### 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
Prerequisites: (ENEG11008 Materials for Engineers or ENEG12005 Materials Science & Engineering) and MATH11218 Applied Mathematics or MATH11219 Engineering Mathematics
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 2 - 2021

- Bundaberg
- Cairns
- Gladstone
- Mackay
- Mixed Mode
- 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).

### Residential Schools
This unit has a Optional Residential School for distance mode students and the details are:
Click here to see your Residential School Timetable.

### 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: 20%
2. **Written Assessment**
Weighting: 20%
3. **Written Assessment**
Weighting: 20%
4. **Online Test**
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 Have your say source; UC and Lecturer

**Feedback**

Major manufacturing processes would be good to learn in more depth.

**Recommendation**

On top of in-class learning, planned manufacturing industry visit, starting from Term 2, 2021, for students of all campuses will help students to learn a wider spectrum of machine manufacturing practices.

#### Feedback from Have your say

**Feedback**

Feedback was informative but could be improved

**Recommendation**

Keep providing comprehensive written feedback in the assignment document indicating the errors and mistakes, amendments and sources where this can be learned more.

#### Feedback from Have your say source

**Feedback**

More concise lecture and more videos on processes.

**Recommendation**

Provide industry-based short videos. 1 hr lecture, 1 hr tutorial, and 1 hr drop-in session.

## Unit Learning Outcomes

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

1. Establish the relationships between the microstructures of materials and their mechanical and manufacturing properties
2. Explain various bulk deformation and material removal processes as applicable to ductile and brittle materials and the machine tools that are used to carry out these operations
3. Calculate the forces, torques and power requirements for various processing of different materials for bulk deformation
4. Analyse the mechanics of metal cutting and the control of various process parameters to achieve optimum material removal and machining economics
5. Apply the knowledge of engineering metrology, instrumentation and quality assurance of manufacturing of products
6. Apply information literacy skills, obtain relevant engineering information and identify appropriate standards and practices
7. Work, learn and communicate in an ethical, professional manner, both individually and in teams.

**The Learning Outcomes for this unit are linked with the Engineers Australia Stage 1 Competency Standards for Professional Engineers in the areas of 1. Knowledge and Skill Base, 2. Engineering Application Ability and 3. Professional and Personal Attributes at the following levels:**

**Intermediate 1.2 Conceptual understanding of the mathematics, numerical analysis, statistics, and computer and information sciences which underpin the engineering discipline. (LO: 2I 3I 4I ) 1.4 Discernment of knowledge development and research directions within the engineering discipline. (LO: 2I 3I 4I 5N ) 1.6 Understanding of the scope, principles, norms, accountabilities and bounds of sustainable engineering practice in the specific discipline. (LO: 1I 2I 3I 4I 5I 6I 7I ) 2.3 Application of systematic engineering synthesis and design processes. (LO: 2I 5I ) 2.4 Application of systematic approaches to the conduct and management of engineering projects. (LO: 3I 4I 6I 7I ) 3.1 Ethical conduct and professional accountability. (LO: 5I 6I 7I ) 3.3 Creative, innovative and pro-active demeanour. (LO: 2I 3I 4I 5I 6I ) 3.5 Orderly management of self, and professional conduct. (LO: 3I 4I 5I )**

**Advanced 1.1 Comprehensive, theory-based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline. (LO: 1N 2A 3I 4I ) 1.3 In-depth understanding of specialist bodies of knowledge within the engineering discipline. (LO: 1I 2A 3A 4I 5N ) 1.5 Knowledge of engineering design practice and contextual factors impacting the engineering discipline. (LO: 2A 3A 4A 5N 6I ) 2.1 Application of established engineering methods to complex engineering problem solving. (LO: 2I 3A 4I 5N ) 2.2 Fluent application of engineering techniques, tools and resources. (LO: 2A 3I 4I 6I ) 3.2 Effective oral and written communication in professional and lay domains. (LO: 1N 2I 3I 4I 5I 6A 7A ) 3.4 Professional use and management of information. (LO: 2N 3A 4A 6N 7N )**

***Note: LO refers to the Learning Outcome number(s) which link to the competency and the levels: N – Introductory, I – Intermediate and A - Advanced.***

**Refer to the Engineering Undergraduate Course Moodle site for further information on the Engineers Australia's Stage 1 Competency Standard for Professional Engineers and course level mapping information[https://moodle.cqu.edu.au/course/view.php?id=1511](https://moodle.cqu.edu.au/course/view.php?id=1511)**

## 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 | 5 | 6 | 7 |
| 1 - Written Assessment - 20% | | • | • | • | • | • | |
| 2 - Written Assessment - 20% | • | • | | • | | • | |
| 3 - Written Assessment - 20% | | | | | | | • |
| 4 - Online Test - 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 - 20% | | • | • | • | | • | | | | |
| 2 - Written Assessment - 20% | | • | • | • | | • | | | | |
| 3 - Written Assessment - 20% | • | • | | | • | | | • | | |
| 4 - Online Test - 40% | • | • | • | | | | | • | | |

## Textbooks and Resources

### Textbooks

ENEM13018

**Prescribed**

**Manufacturing Engineering and Technology**
Edition: 7 (2014)
Authors: Serope Kalpakjian, Steven Schmid
Pearson Higher Ed
ISBN: 9780133128741
Binding: Paperback
ENEM13018

**Supplementary**

**Materials and Processes in Manufacturing**
Authors: E. Paul DeGarmo, J. T. Black, R. A. Kosher
Wiley
Binding: Paperback

**Additional Textbook Information**
Both paper and eBook versions can be purchased at 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 style: Harvard (author-date)
For further information, see the Assessment Tasks.

## Teaching Contacts

**Abdul Mazid** Unit Coordinator
a.mazid@cqu.edu.au

## Schedule

**Week 1: Mechanics of metal machining - 12 Jul 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| One hour lecture: Introduction to Manufacturing Processes; Mechanics of metal cutting: Merchants theory, Chips formation, Cutting forces. | Textbook Chapter 20 | One hour Tutorial via Zoom.. One hour interactive drop-in session via Zoom. . |

**Week 2: Cutting tools - 19 Jul 2021**

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

| | | |
|---|---|---|
| One hour lecture:<br>Cutting tools: classification, materials, geometry; Cutting fluids. | 21 | One hour Tutorial via Zoom..<br>One hour interactive drop-in session via Zoom. . |

**Week 3: Turning and boring processes - 26 Jul 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| One hour lecture:<br>Turning and boring processes. Tools and turning parameters. | 22 | One hour Tutorial via Zoom..<br>One hour interactive drop-in session via Zoom. |

**Week 4: Drilling and hole making processes - 02 Aug 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| One hour lecture:<br>Drilling, boring, reaming, and relevant processes. | 22 | One hour Tutorial via Zoom..<br>One hour interactive drop-in session via Zoom. |

**Week 5: Milling processes - 09 Aug 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| One hour lecture:<br>Milling processes for various shapes. | 23 | One hour Tutorial via Zoom..<br>One hour interactive drop-in session via Zoom.<br><br>**Problem solving on manufacturing processes** Due: Week 5 Friday (13 Aug 2021) 12:00 am AEST |

**Vacation Week - 16 Aug 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| Study break - work on assignments | 20 - 23 | One hour Tutorial via Zoom..<br>One hour interactive drop-in session via Zoom. |

**Week 6: Abrasive machining processes - 23 Aug 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| One hour lecture:<br>Grinding and relevant processes. Grinding wheels and fluid. | 25 | One hour Tutorial via Zoom..<br>One hour interactive drop-in session via Zoom. |

**Week 7: Gear manufacturing processes - 30 Aug 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| One hour lecture:<br>Gear cutting and forming processes. | 23 | One hour Tutorial via Zoom..<br>One hour interactive drop-in session via Zoom. |

**Week 8: Machining centres - 06 Sep 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| One hour lecture:<br>Machining centres: Numerical control (NC) and computer numerical control (CNC) machine tools; Computer integrated manufacturing (CIM). | Lecture notes and Chapter 24 | Industry site visit.(TBA)<br>One hour Tutorial via Zoom..<br>One hour interactive drop-in session via Zoom. |

**Week 9: Metal forming processes - 13 Sep 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| One hour lecture:<br>Forming processes: Cold and hot forming processes, Micro-structure and anisotropy; | 13 | Industry site visit.(TBA)<br>One hour Tutorial via Zoom..<br>One hour interactive drop-in session via Zoom.<br><br>**Production processes development** Due: Week 9 Friday (17 Sept 2021) 12:00 am AEST |

**Week 10: Welding processes - 20 Sep 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| One hour lecture:<br>Welding processes: Oxyfuel gas welding, Arc welding, TIG and MIG welding.<br>Micro-structure and quality of weld. | 27 | One hour Tutorial via Zoom..<br>One hour interactive drop-in session via Zoom. |

**Week 11: Casting processes - 27 Sep 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| One hour lecture:<br>Casting metals and plastics: Conventional and die casting processes; plastic moulding, cast quality; | 11 | One hour Tutorial via Zoom..<br>One hour interactive drop-in session via Zoom. |

**Week 12: Advanced manufacturing - 04 Oct 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| One hour lecture:<br>Additive and advanced manufacturing processes (Selected processes only) | H El-Hofy - Advanced machining processes (McGraw-Hill) and lecture notes | One hour Tutorial via Zoom..<br>One hour interactive drop-in session via Zoom.<br><br>**Research Report** Due: Week 12 Friday (8 Oct 2021) 12:00 am AEST |

**Review/Exam Week - 11 Oct 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| Final assessment | | QUIZ (3 hr duration) at 3 PM 17 Aug. |

**Exam Week - 18 Oct 2021**

| Module/Topic | Chapter | Events and Submissions/Topic |
|---|---|---|
| | | **On-line Test / QUIZ** Due: Exam Week Wednesday (20 Oct 2021) 3:00 pm AEST |

## Assessment Tasks

### 1 Problem solving on manufacturing processes

**Assessment Type**
Written Assessment

**Task Description**
This assessment item involves design analysis and numerical problem solving based on theories and mechanics of metal machining, machine tools and tooling. This will instill your theoretical knowledge gained in areas of turning, milling, drilling and other machining processes with reflection on real life scenario of manufacturing processes. A set of relevant problems will be provided at the beginning of the Term.

**Assessment Due Date**
Week 5 Friday (13 Aug 2021) 12:00 am AEST

**Return Date to Students**
Week 7 Friday (3 Sept 2021)

**Weighting**
20%

**Minimum mark or grade**
50%

**Assessment Criteria**
Each problem-solving answer will be assessed considering the following factors:

1. Correct approach and schematic of the problem demonstrating clear understanding of it (20% marks);
2. Selection and appropriate use of right theory/equations and procedures (20% marks);
3. Appropriate solving methodology using the right theory/equations and procedures (50% marks);
4. Neat and cleanliness, and orderly work-flow (10% marks).

**Referencing Style**

- Harvard (author-date)

**Submission**
Online

**Submission Instructions**
One pdf document with a title page

**Learning Outcomes Assessed**

- Explain various bulk deformation and material removal processes as applicable to ductile and brittle materials and the machine tools that are used to carry out these operations
- Calculate the forces, torques and power requirements for various processing of different materials for bulk deformation
- Analyse the mechanics of metal cutting and the control of various process parameters to achieve optimum material removal and machining economics
- Apply the knowledge of engineering metrology, instrumentation and quality assurance of manufacturing of products
- Apply information literacy skills, obtain relevant engineering information and identify appropriate standards and practices

**Graduate Attributes**

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

## 2 Production processes development

**Assessment Type**
Written Assessment

**Task Description**
This assessment item involves selecting one machine part and developing complete manufacturing processes routed from machine to machine for individual operation in an economic way considering the part handling and operation time. The designed well-routed processes will transform a work-piece into a finished product. Initially students are supposed to prepare manufacturing drawing/s of selected part/s in 2D form (follow ISO or AS1100) showing geometric dimensions with tolerances and surface finish grades (where necessary). Considering the created part design students will design, step by step, the machining processes using all or some of the processes like turning, milling, drilling, grinding, etc. For each of the processes chosen you need to choose cutting tool/s and using the data you need to calculate/estimate/select operational parameters like cutting speed, feed rate and depth of cut considering the accepted dimensional tolerances and surface roughness. Each step of operations must be appropriately documented for helping the machine operator for production. At the end you may wish to calculate the production cost of the part using your designed processes and routing.

**Assessment Due Date**
Week 9 Friday (17 Sept 2021) 12:00 am AEST

**Return Date to Students**
Week 11 Friday (1 Oct 2021)

**Weighting**
20%

**Minimum mark or grade**
50%

**Assessment Criteria**

Marking criteria for this creative assignment are:

1. Production of ISO standard (AS1100) part drawing in 2D showing all necessary dimensions with tolerances and surface finish grades (20% marks);
2. Creation of appropriate documentation of economic operation routing and machining operation instruction demonstrating the operation in drawing, selecting/estimating values of operation parameters (v, f,d), cutting tool, job clamping methods and engineering metrology procedures. This document must help machine operators in machine setting, tool selection and cutting regime (v, f, d) setting without any physical presence or help of engineers. (60% marks);
3. Production cost calculation of your part (10% marks);
4. Appropriate presentation of all process documentation for easy and friendly uses and neatness (10%).

**Referencing Style**

- Harvard (author-date)

**Submission**
Online Group

**Submission Instructions**
Maximum four students in group; first named student on title page is supposed to upload assignment in pdf version.

**Learning Outcomes Assessed**

- Establish the relationships between the microstructures of materials and their mechanical and manufacturing properties
- Explain various bulk deformation and material removal processes as applicable to ductile and brittle materials and the machine tools that are used to carry out these operations
- Analyse the mechanics of metal cutting and the control of various process parameters to achieve optimum material removal and machining economics
- Apply information literacy skills, obtain relevant engineering information and identify appropriate standards and practices

**Graduate Attributes**

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

## 3 Research Report

**Assessment Type**
Written Assessment

**Task Description**
During the Term all students of all campuses will attend an industry site visit in a manufacturing or relevant production engineering industry. On-line students working themselves in engineering company may be exempted from site visit; anyone interested to join the visit should directly talk to the UC. This assignment is dedicated to write a technical research report on the processes visited in the host industry. On-line students may select a work-related topic in consultation with the UC.
This assignment is designed to develop your skills and understanding of workpiece/part manufacturing using any of the processes like casting, forming, hot- and cold rolling, welding, powder metallurgy, or any other production systems you visited in the site visit. At the end you will produce a technical report in a fruitful and constructive manner for assessment. Students will select a topic in consultation with UC/Lecturer/Tutor. Students are supposed accomplish enhanced research within their selected topic area and produce review output of the selected processes. You may need to visit several databases exploring technical journals and conferences, textbooks, and industry websites to gather information. Structure of the report to be submitted may contain title page, aim and objectives, introduction and background, full process description and explanation including illustrations, schematics, images etc., applications and economic aspects, as necessary.

**Assessment Due Date**
Week 12 Friday (8 Oct 2021) 12:00 am AEST

**Return Date to Students**
Exam Week Friday (22 Oct 2021)

**Weighting**
20%

**Minimum mark or grade**
50%

**Assessment Criteria**
The technical report assessment will be guided by the following factors:

1. Topic of Report relevance to visited industry.
2. Minimum 10 resources (published articles, company websites, videos, and promotional presentations, etc.) to be visited and studied. Out of these at least 05 well reputed published articles and very related resources will be appreciated. Complying all of these in perfection may carry 20% marks.
3. Demonstration of skills of narration including methods, procedures and materials involved in the processes, economic and environmental aspects of the processes, and critical comments, appreciation, and criticism will carry 50% marks.
4. Demonstration of enough evidences like graphs, labelled images, figures with perfect explanations and any other necessary data/information on economic impact and relevant government policies referencing in relevant to the technology in the report will carry 30% marks.

**Referencing Style**

- Harvard (author-date)

**Submission**
Online

**Submission Instructions**
One document with title page. Neatness and cleanliness are essential.

**Learning Outcomes Assessed**

- Work, learn and communicate in an ethical, professional manner, both individually and in teams.

**Graduate Attributes**

- Communication
- Problem Solving
- Team Work
- Ethical practice

## 4 On-line Test / QUIZ

**Assessment Type**
Online Test

**Task Description**
On-line test/quiz may contain short and/or long questions, manufacturing processes design based questions, analysis and numerical problem solving spreading over the study materials of all 12 weeks.

**Assessment Due Date**
Exam Week Wednesday (20 Oct 2021) 3:00 pm AEST

**Return Date to Students**

**Weighting**
40%

**Minimum mark or grade**
50%

**Assessment Criteria**
Marks selection will be indicated for each of the question or for each portion of the questions providing enough factors of assessment.

**Referencing Style**

- Harvard (author-date)

**Submission**
Online

**Learning Outcomes Assessed**

- Establish the relationships between the microstructures of materials and their mechanical and manufacturing properties
- Explain various bulk deformation and material removal processes as applicable to ductile and brittle materials and the machine tools that are used to carry out these operations
- Calculate the forces, torques and power requirements for various processing of different materials for bulk deformation
- Analyse the mechanics of metal cutting and the control of various process parameters to achieve optimum material removal and machining economics
- Apply the knowledge of engineering metrology, instrumentation and quality assurance of manufacturing of products
- Work, learn and communicate in an ethical, professional manner, both individually and in teams.

**Graduate Attributes**

- Communication
- Problem Solving
- Critical Thinking
- 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