ENEE13019 *Control Systems Analysis and Design*
Term 1 - 2017

Profile information current as at 28/04/2024 10:32 am

General Information

Overview
Students should be able to work in teams to model, analyse and investigate design options for analogue and digital control systems. On satisfactory completion students should be able to articulate typical control systems building blocks, and select appropriate components and interfaces for specific applications. In addition, students will be able to develop mathematical models to analyse the behaviour of selected dynamic systems and to design controllers for these systems. Distance Education (Flex) students will be required to attend a residential school to promote development of unit learning outcomes.

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
ENEE13020 Digital Electronics and ENEE13018 Analogue Electonics
Important note: Students enrolled in a subsequent unit who failed their pre-requisite unit, should drop the subsequent unit before the census date or within 10 working days of Fail grade notification. Students who do not drop the unit in this timeframe cannot later drop the unit without academic and financial liability. See details in the Assessment Policy and Procedure (Higher Education Coursework).

Offerings For Term 1 - 2017

- Bundaberg
- Distance
- Gladstone
- Mackay
- 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 Compulsory 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. **Practical Assessment**
Weighting: 10%
3. **Practical Assessment**
Weighting: 10%
4. **Written Assessment**
Weighting: 20%
5. **Written Assessment**
Weighting: Pass/Fail
6. **Examination**
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 Telephone conversations, residential school, workshops

Feedback
Students have praised and thanked course co-ordinator/lecturer for prompt response and follow up to queries and questions.

Recommendation
New course co-ordinator/lecturer to continue to adopt these current practices.

Action
Unit co-ordinator/lecturer has continued to provide prompt response and follow up to queries and questions.

Feedback from Telephone conversations, residential school, workshops

Feedback
Students have praised and thanked course co-ordinator/lecturer for detailed and focussed feedback on assignments and laboratory reports.

Recommendation
New course co-ordinator/lecturer to continue to adopt these current practices.

Action
Unit co-ordinator/lecturer has continued to provide detailed and focussed feedback on assignments and laboratory reports.

Feedback from Telephone conversations, residential school, workshop

Feedback
Students have praised and thanked course co-ordinator/lecturer for detailed solutions and problem solving and technical advice provided in lectures and tutorial problems.

Recommendation
New course co-ordinator/lecturer to continue to adopt these current practices.

Action
Unit co-ordinator/lecturer has continued to provide detailed solutions and problem solving and technical advice in lectures and tutorial problems.

Unit Learning Outcomes

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

1. Explain the principles of automatic control systems and typical control system building blocks [1, 3]
2. Articulate the principles and applications of sensors & final control elements in an automatic control system [1, 3, 5]
3. Discuss the role of the controller and explain its role in a control system [1, 3, 5]
4. Model and analyse the behaviour of dynamic systems and the controller in combination using appropriate mathematical, graphical and computer aided tools [1, 3]
5. Investigate and report the process of controller design for a dynamic system [1, 2, 3, 4, 5]
6. Communicate effectively using control systems terminology, symbols and diagrams and prepare solutions and calculations documents professionally [1, 2, 3, 5, 9]
7. Work collaboratively and autonomously to solve problems and record and communicate clearly and professionally the approach used to solve problems [2, 4, 6, 9, 10]

Each of the above Learning Outcomes contributes to the development of the Engineers Australia's Professional Graduate Attributes (abridged) designated by [ ]:
1. science and engineering fundamentals
2. communicate effectively.
3. technical competence
4. problem identification and solution.
5. systems design and operation
6. individual and teamwork
7. professionalism and ethics.
8. lifelong learning.
2. communicate effectively
3. technical competence
4. problem identification and solution
5. systems design and operation
6. individual and teamwork
7. broad perspectives
8. sustainability framework
9. professionalism and ethics
10. lifelong learning

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 - Practical Assessment - 10%				•	•	•	•
3 - Practical Assessment - 10%				•	•	•	•
4 - Written Assessment - 20%	•	•	•	•	•	•	
5 - Written Assessment - 0%	•	•	•	•	•	•	•

Assessment Tasks	Learning Outcomes						
	1	2	3	4	5	6	7
6 - Examination - 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 - Practical Assessment - 10%	•	•	•	•	•	•				
3 - Practical Assessment - 10%	•	•	•	•	•	•				
4 - Written Assessment - 20%	•	•	•	•		•				
5 - Written Assessment - 0%	•	•	•	•		•				
6 - Examination - 40%	•	•	•							

Textbooks and Resources

Textbooks

ENEE13019

Prescribed

Control Systems Engineering
Edition: 7th edn (2013)
Authors: Nise, N.S.
John Wiley & Sons
Hoboken , NJ , USA
ISBN: 978-1-118-17051-9
Binding: Hardcover

Additional Textbook Information

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Access to a digital camera
- Access to a document scanner and pdf convereter
- A speaker and mic or a head set

Referencing Style

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

Teaching Contacts

Patrick Keleher Unit Coordinator
p.keleher@cqu.edu.au

Schedule

Week 1 - 06 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to Control Systems, Laplace Transforms & Their inverses, transfer function	1 & 2 (2.1-2.3)	

Week 2 - 13 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Modelling in Electrical and Mechanical Systems	2 (2.4-2.8)	

Week 3 - 20 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Modelling in the Time Domain	3	

Week 4 - 27 Mar 2017

Module/Topic	Chapter	Events and Submissions/Topic
Reduction of Multiple Subsystems	5	**Assignment 1** Due: Week 4 Friday (31 Mar 2017) 10:00 pm AEST

Week 5 - 03 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Poles, Zeros and System Response	4	

Vacation Week - 10 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic

Week 6 - 17 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Stability	6 & 7	Lab 1 Matlab Experiment

Week 7 - 24 Apr 2017

Module/Topic	Chapter	Events and Submissions/Topic
Steady State Error	7	

Week 8 - 01 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Control Systems - PLCs and SCADA	No text reference	**Formal Laboratory Write-up - 1** Due: Week 8 Friday (5 May 2017) 10:00 pm AEST

Week 9 - 08 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Controller Design: Root Locus	8 & 9	Lab 2 - PLCs **Assignment 2** Due: Week 9 Friday (12 May 2017) 10:00 pm AEST

Week 10 - 15 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Frequency Response techniques	10 & 11	

Week 11 - 22 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Analysis of Discrete Controller Design	13	**Formal Laboratory Write-up -2** Due: Week 11 Friday (26 May 2017) 10:00 pm AEST

Week 12 - 29 May 2017

Module/Topic	Chapter	Events and Submissions/Topic
Discrete Controller Design	13	**Workbook** Due: Week 12 Friday (2 June 2017) 10:00 pm AEST

Review/Exam Week - 05 Jun 2017

Module/Topic	Chapter	Events and Submissions/Topic
Review of topics.		

Exam Week - 12 Jun 2017

Module/Topic	Chapter	Events and Submissions/Topic

Assessment Tasks

1 Assignment 1

Assessment Type
Written Assessment

Task Description
You must provide detailed solutions to the problems indicated in the assignment in order to demonstrate your knowledge and understanding of the concepts and processes. This assignment is from the content covered in weeks 1 to 2.

Assessment Due Date
Week 4 Friday (31 Mar 2017) 10:00 pm AEST

Return Date to Students
Monday (24 Apr 2017)
Uploaded into Moodle

Weighting
20%

Assessment Criteria
Each question will be assessed for presentation and layout, correct procedure and accuracy. Further information will be available on the Assignment sheet in Moodle.

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
You are expected to submit your submission electronically using the upload link in the course Moodle site. The upload link on the course Moodle site will become active as the due date for that assessment item approaches. Note the upload link closes at the time indicated (AEST) and becomes inaccessible; so upload well in advance of this submission time. It is not expected students will type up calculations. Students should scan hand calculations for online submission. If uploading a handwritten submission your handwriting must be neat and legible and be written using a permanent pen - ie. biro. No submission will be assessed that is written in pencil as they can be extremely difficult to read. In order for us to assess your submission electronically all submissions (electronic files or handwritten) must be scanned/collated as a single PDF file; no other file types are accepted. Submissions not scanned nor saved as a single PDF file will not be assessed. It is your responsibility to convert your files to PDF format. No coversheet is required when submitting assessment items electronically. Also please do not include any unnecessary graphics on the front page of your submission as it only serves to increase the size of your file and greatly increase the upload time in submitting your file. It is expected you would include a plain front page (without any unnecessary graphics) that highlights the course code and name, lecturer's name, assessment type and number (eg. Assignment 1), your student number and then your name; list all group members. Please note it is expected you will adopt the file-naming protocol indicated on the Moodle site and for it to be followed as exactly as it is indicated. It is extremely important that you do this as your individual file is one of many and replicating the correct file-naming protocol reduces chances of omissions, losses and errors.

Learning Outcomes Assessed

- Explain the principles of automatic control systems and typical control system building blocks [1, 3]
- Articulate the principles and applications of sensors & final control elements in an automatic control system [1, 3, 5]
- Discuss the role of the controller and explain its role in a control system [1, 3, 5]
- Model and analyse the behaviour of dynamic systems and the controller in combination using appropriate mathematical, graphical and computer aided tools [1, 3]
- Investigate and report the process of controller design for a dynamic system [1, 2, 3, 4, 5]
- Communicate effectively using control systems terminology, symbols and diagrams and prepare solutions and calculations documents professionally [1, 2, 3, 5, 9]

Graduate Attributes

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

2 Formal Laboratory Write-up - 1

Assessment Type
Practical Assessment

Task Description
You must provide detailed laboratory reports by adopting the format outlined on the course Moodle site. Failure to adopt the format will result in you obtaining a lower grade for your submission as you will not be appropriately demonstrating your knowledge and understanding.

Assessment Due Date
Week 8 Friday (5 May 2017) 10:00 pm AEST
Distance students need to attend a compulsory residential school and internal students have laboratories scheduled through the term. Details will be provided during the term and you will be advised of the submission date at that time.

Return Date to Students
Week 10 Friday (19 May 2017)
Distance students need to attend a compulsory residential school and internal students have laboratories scheduled through the term. Details will be provided during the term and you will be advised of return date at that time.

Weighting
10%

Minimum mark or grade
Students must achieve atleast 50% to pass this laboratory.

Assessment Criteria
Your lab report will be assessed for presentation and layout, correct procedure and accuracy. Further information will be be provided in Moodle

Referencing Style

- Harvard (author-date)

Submission
Online Group

Submission Instructions
You are expected to submit your submission electronically using the upload link in the course Moodle site. The upload link on the course Moodle site will become active as the due date for that assessment item approaches. Note the upload link closes at the time indicated (AEST) and becomes inaccessible; so upload well in advance of this submission time. If uploading a handwritten submission your handwriting must be neat and legible and be written using a permanent pen - ie. biro. No submission will be assessed that is written in pencil as they can be extremely difficult to read. In order for us to assess your submission electronically all submissions (electronic files or handwritten) must be scanned/collated as a single PDF file; no other file types are accepted. Submissions not scanned nor saved as a single PDF file will not be assessed. It is your responsibility to convert your files to PDF format. No coversheet is required when submitting assessment items electronically. Also please do not include any unnecessary graphics on the front page of your submission as it only serves to increase the size of your file and greatly increase the upload time in submitting your file. It is expected you would include a plain front page (without any unnecessary graphics) that highlights the course code and name, lecturer's name, assessment type and number (eg. Laboratory 1), your student number and then your name; list all group members. Please note it is expected you will adopt the file-naming protocol indicated on the Moodle site and for it to be followed as exactly as it is indicated. It is extremely important that you do this as your individual file is one of many and replicating the correct file-naming protocol reduces chances of omissions, losses and errors.

Learning Outcomes Assessed

- Model and analyse the behaviour of dynamic systems and the controller in combination using appropriate mathematical, graphical and computer aided tools [1, 3]
- Investigate and report the process of controller design for a dynamic system [1, 2, 3, 4, 5]
- Communicate effectively using control systems terminology, symbols and diagrams and prepare solutions and calculations documents professionally [1, 2, 3, 5, 9]
- Work collaboratively and autonomously to solve problems and record and communicate clearly and professionally the approach used to solve problems [2, 4, 6, 9, 10]

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy

- Team Work
- Information Technology Competence

3 Formal Laboratory Write-up -2

Assessment Type
Practical Assessment

Task Description
You must provide detailed laboratory reports by adopting the format outlined on the course Moodle site. Failure to adopt the format will result in you obtaining a lower grade for your submission as you will not be appropriately demonstrating your knowledge and understanding.

Assessment Due Date
Week 11 Friday (26 May 2017) 10:00 pm AEST
Distance students need to attend a compulsory residential school and internal students have laboratories scheduled through the term. Details will be provided during the term and you will be advised of the submission date at that time.

Return Date to Students
Review/Exam Week Friday (9 June 2017)
Distance students need to attend a compulsory residential school and internal students have laboratories scheduled through the term. Details will be provided during the term and you will be advised of return date at that time.

Weighting
10%

Minimum mark or grade
Students must achieve atleast 50% to pass this laboratory.

Assessment Criteria
Your lab report will be assessed for presentation and layout, correct procedure and accuracy. Further information will be be provided in Moodle

Referencing Style

- Harvard (author-date)

Submission
Online Group

Submission Instructions
You are expected to submit your submission electronically using the upload link in the course Moodle site. The upload link on the course Moodle site will become active as the due date for that assessment item approaches. Note the upload link closes at the time indicated (AEST) and becomes inaccessible; so upload well in advance of this submission time. If uploading a handwritten submission your handwriting must be neat and legible and be written using a permanent pen - ie. biro. No submission will be assessed that is written in pencil as they can be extremely difficult to read. In order for us to assess your submission electronically all submissions (electronic files or handwritten) must be scanned/collated as a single PDF file; no other file types are accepted. Submissions not scanned nor saved as a single PDF file will not be assessed. It is your responsibility to convert your files to PDF format. No coversheet is required when submitting assessment items electronically. Also please do not include any unnecessary graphics on the front page of your submission as it only serves to increase the size of your file and greatly increase the upload time in submitting your file. It is expected you would include a plain front page (without any unnecessary graphics) that highlights the course code and name, lecturer's name, assessment type and number (eg. Laboratory 2), your student number and then your name; list all group members. Please note it is expected you will adopt the file-naming protocol indicated on the Moodle site and for it to be followed as exactly as it is indicated. It is extremely important that you do this as your individual file is one of many and replicating the correct file-naming protocol reduces chances of omissions, losses and errors.

Learning Outcomes Assessed

- Model and analyse the behaviour of dynamic systems and the controller in combination using appropriate mathematical, graphical and computer aided tools [1, 3]
- Investigate and report the process of controller design for a dynamic system [1, 2, 3, 4, 5]
- Communicate effectively using control systems terminology, symbols and diagrams and prepare solutions and calculations documents professionally [1, 2, 3, 5, 9]
- Work collaboratively and autonomously to solve problems and record and communicate clearly and professionally the approach used to solve problems [2, 4, 6, 9, 10]

Graduate Attributes

- Communication

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

4 Assignment 2

Assessment Type
Written Assessment

Task Description
You must provide detailed solutions to the problems indicated in the assignment in order to demonstrate your knowledge and understanding of the concepts and processes. This assignment is based on the content covered from weeks 1- 7.

Assessment Due Date
Week 9 Friday (12 May 2017) 10:00 pm AEST

Return Date to Students
Week 11 Friday (26 May 2017)

Weighting
20%

Assessment Criteria
Each question will be assessed for presentation and layout, correct procedure and accuracy. Further information will be available on the Assignment sheet in Moodle.

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
You are expected to submit your submission electronically using the upload link in the course Moodle site. The upload link on the course Moodle site will become active as the due date for that assessment item approaches. Note the upload link closes at the time indicated (AEST) and becomes inaccessible; so upload well in advance of this submission time. It is not expected students will type up calculations. Students should scan hand calculations for online submission. If uploading a handwritten submission your handwriting must be neat and legible and be written using a permanent pen - ie. biro. No submission will be assessed that is written in pencil as they can be extremely difficult to read. In order for us to assess your submission electronically all submissions (electronic files or handwritten) must be scanned/collated as a single PDF file; no other file types are accepted. Submissions not scanned nor saved as a single PDF file will not be assessed. It is your responsibility to convert your files to PDF format. No coversheet is required when submitting assessment items electronically. Also please do not include any unnecessary graphics on the front page of your submission as it only serves to increase the size of your file and greatly increase the upload time in submitting your file. It is expected you would include a plain front page (without any unnecessary graphics) that highlights the course code and name, lecturer's name, assessment type and number (eg. Assignment 2), your student number and then your name; list all group members. Please note it is expected you will adopt the file-naming protocol indicated on the Moodle site and for it to be followed as exactly as it is indicated. It is extremely important that you do this as your individual file is one of many and replicating the correct file-naming protocol reduces chances of omissions, losses and errors.

Learning Outcomes Assessed

- Explain the principles of automatic control systems and typical control system building blocks [1, 3]
- Articulate the principles and applications of sensors & final control elements in an automatic control system [1, 3, 5]
- Discuss the role of the controller and explain its role in a control system [1, 3, 5]
- Model and analyse the behaviour of dynamic systems and the controller in combination using appropriate mathematical, graphical and computer aided tools [1, 3]
- Investigate and report the process of controller design for a dynamic system [1, 2, 3, 4, 5]
- Communicate effectively using control systems terminology, symbols and diagrams and prepare solutions and calculations documents professionally [1, 2, 3, 5, 9]

Graduate Attributes

- Communication
- Problem Solving

- Critical Thinking
- Information Literacy
- Information Technology Competence

5 Workbook

Assessment Type
Written Assessment

Task Description
You must provide detailed solutions to **all** tutorial problems in order to demonstrate your knowledge and understanding of the concepts and processes. **Only** tutorial problems (no lecture notes or other notes) are to be included in the workbook and each set of tutorial problems needs to be clearly identified from the next.

Assessment Due Date
Week 12 Friday (2 June 2017) 10:00 pm AEST

Return Date to Students

Workbooks are assessed after the examination marking has been completed for the course.

Weighting
Pass/Fail

Minimum mark or grade
You must submit the workbook as a requirement to successfully completing the course.

Assessment Criteria
The workbook is assessed on its merit of meeting the requirements of demonstrating your knowledge and understanding of the concepts and processes. Note that assessment will take into account presentation and layout.

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
Your workbook needs to be scanned and submitted through the upload link provided.

Learning Outcomes Assessed

- Explain the principles of automatic control systems and typical control system building blocks [1, 3]
- Articulate the principles and applications of sensors & final control elements in an automatic control system [1, 3, 5]
- Discuss the role of the controller and explain its role in a control system [1, 3, 5]
- Model and analyse the behaviour of dynamic systems and the controller in combination using appropriate mathematical, graphical and computer aided tools [1, 3]
- Investigate and report the process of controller design for a dynamic system [1, 2, 3, 4, 5]
- Communicate effectively using control systems terminology, symbols and diagrams and prepare solutions and calculations documents professionally [1, 2, 3, 5, 9]
- Work collaboratively and autonomously to solve problems and record and communicate clearly and professionally the approach used to solve problems [2, 4, 6, 9, 10]

Graduate Attributes

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

Examination

Outline
Complete an invigilated examination.

Date
During the examination period at a CQUniversity examination centre.

Weighting
40%

Length
180 minutes

Minimum mark or grade
50%

Exam Conditions
Open Book.

Materials
Calculator - all non-communicable calculators, including scientific, programmable and graphics calculators are authorised
Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).

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