ENEC14014 *Structural and Geotechnical Design*

Term 1 - 2022

Profile information current as at 24/04/2024 08:22 am

General Information

Overview

In this unit, you will analyse, design and prepare documentation for major civil engineering projects involving a broad range of investigation and design activities. You will establish project requirements and determine design loads and conditions, analyse structures and design components using Australian Standards and/or relevant guidance. You will use commercial computer software to analyse and design the structures with various design actions; conduct site investigations, test and characterise geotechnical materials, design foundations and earth retaining structures, and make assessments of geotechnical stability. In this unit, you are expected to document the process of modelling, testing and analysis, and communicate, work and learn, both individually and in teams, in a professional manner. In this unit, you must complete compulsory practical activities. Refer to the Engineering Undergraduate Course Moodle site for proposed dates.

Details

Career Level: *Undergraduate*
Unit Level: *Level 4*
Credit Points: *12*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.25*

Pre-requisites or Co-requisites

Prerequisite: (ENEC12012 Stress Analysis or ENEC13010 Solid Mechanics) AND ENEC12008 Geotechnical Engineering AND (ENEC13015 Steel & Timber Design or ENEC13011 Steel Structures) AND (ENEC13016 Concrete Technology & Design or ENEC14013 Concrete Structures)
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 - 2022

- 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 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 12-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 25 hours of study per week, making a total of 300 hours for the unit.

Class Timetable

Regional Campuses
Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

Metropolitan Campuses
Adelaide, Brisbane, Melbourne, Perth, Sydney

Assessment Overview

1. **Portfolio**
Weighting: 50%
2. **Portfolio**
Weighting: 30%
3. **Oral Examination**
Weighting: 20%

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 Moodle

Feedback
Both structural and geotechnical engineering assessments were very relevant and practice-oriented.

Recommendation
The high fidelity assessments will be maintained in future offerings.

Feedback from Moodle

Feedback
The course content was diverse and informative.

Recommendation
The diversity of the content will be upheld in the next offering.

Feedback from Moodle

Feedback
The lecturers were very well planned, in-depth discussion of topics and never stretched for time.

Recommendation
The conceptual discussions and their articulation in an easy to understand manner is central to this design unit and this teaching style will be maintained in future.

Feedback from Moodle

Feedback
Some assessments were returned late which hindered learning.

Recommendation
Care will be taken to return assessments within the two-week time period.

Feedback from Moodle

Feedback
RC design and labs could have been taught in other units.

Recommendation
This is a high priority and the teaching team is working to restructure some aspects of the unit. The lab component has now been moved and from 2023 onward will be discontinued.

Unit Learning Outcomes

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

1. Demonstrate a commitment to ethical practice by promoting principles of sustainable development and awareness of stakeholder requirements
2. Determine and justify loads and load combinations for a structural system
3. Analyse and design concrete and masonry structural components using appropriate Australian Standards
4. Describe and apply site investigation and geotechnical testing techniques to characterise sites and geotechnical materials based on Australian Standards
5. Analyse and design foundations and earth retaining structures and assess the stability of slopes
6. Accurately model and analyse structural and geotechnical systems using industry-standard software and Australian Standards.

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:

Introductory

3.1 Ethical conduct and professional accountability. (LO: 3N)

Intermediate

1.2 Conceptual understanding of the mathematics, numerical analysis, statistics, and computer and information sciences which underpin the engineering discipline. (LO: 3I)

1.4 Discernment of knowledge development and research directions within the engineering discipline. (LO: 2I 3I 4I)

3.5 Orderly management of self, and professional conduct. (LO: 4I)

Advanced

1.1 Comprehensive, theory-based understanding of the underpinning natural and physical sciences and the engineering fundamentals applicable to the engineering discipline. (LO: 3A 4I)

1.3 In-depth understanding of specialist bodies of knowledge within the engineering discipline. (LO: 2A 3A 4I 5A)

1.5 Knowledge of engineering design practice and contextual factors impacting the engineering discipline. (LO: 2A 3A 5A)

1.6 Understanding of the scope, principles, norms, accountabilities and bounds of sustainable engineering practice in the specific discipline. (LO: 1A 3I)

2.1 Application of established engineering methods to complex engineering problem solving. (LO: 3A 5A)

2.2 Fluent application of engineering techniques, tools and resources. (LO: 3A 5A 6A)

2.3 Application of systematic engineering synthesis and design processes. (LO: 2A 3A 4A 5A)

2.4 Application of systematic approaches to the conduct and management of engineering projects. (LO: 2I 3A 5A)

3.2 Effective oral and written communication in professional and lay domains. (LO: 3A 4A)

3.6 Effective team membership and team leadership. (LO: 3A 4A)

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

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
1 - Portfolio - 50%	•	•	•			•
2 - Portfolio - 30%	•			•	•	•
3 - Oral Examination - 20%		•	•	•	•	

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
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						

Textbooks and Resources

Textbooks

ENEC14014

Prescribed

Soil Mechanics and Foundations
Edition: 3rd (2010)
Authors: Muni Budhu
John Wiley & Sons
USA
ISBN: 978-0-470-55684-9
Binding: Hardcover
ENEC14014

Supplementary

Foundation Design: Principles and Practices
Edition: 3rd (2015)
Authors: Coduto, D. P., Kitch, W. A., Yeung, M. R.
Pearson
USA
ISBN: 9780133411898
Binding: Hardcover
ENEC14014

Supplementary

Reinforced and Prestressed Concrete
Edition: 3rd (2018)
Authors: Yew-Chaye Loo, Sanaul H. Chowdhury
Cambridge University Press
Melbourne , VIC , Australia
ISBN: 9781108405645
Binding: Hardcover

Additional Textbook Information

Further information regarding Reinforced and Prestressed Concrete:
This edition has been written based on the Australian Standard for Concrete Structures AS3600–2009. Since then the AS3600 was updated and a new version is released in 2018 as Australian Standard for Concrete Structures AS3600-2018. Therefore, this textbook may not necessarily reflect recent amendments and addenda to AS3600-2018. However, an errata for this book will be provided through the unit website.

View textbooks at the CQUniversity Bookshop

IT Resources

You will need access to the following IT resources:

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Finite Element Software for Structural Analysis: SPACE GASS

Referencing Style

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

Teaching Contacts

Sarkar Noor E Khuda Unit Coordinator
s.noorekhuda@cqu.edu.au

Schedule

Week 1 - 07 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
Lecture 1: Introducing the course and discussion on soil bearing capacity **Lecture 2:** Masonry Design **Tutorial 1:** Geotechnical Engineering **Tutorial 2:** Structural Engineering	**Geotechnical Design:** Bearing Capacity of Shallow Foundation **Structural Design:** Masonry Design (AS3700-2018)	

Week 2 - 14 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
Lecture 1: Bearing Capacity II **Lecture 2:** Masonry Design and Material Properties **Tutorial 1:** Geotechnical Engineering **Tutorial 2:** Structural Engineering	**Geotechnical Design:** Bearing Capacity of Shallow Foundation (continued) **Structural Design:** Masonry, Material Properties, Design of Control Joints (AS3700-2018)	

Week 3 - 21 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
Lecture 1: Bearing Capacity III **Lecture 2:** Design of Unreinforced Masonry I **Tutorial 1:** Geotechnical Engineering **Tutorial 2:** Structural Engineering	**Geotechnical Design:** Pile Foundation **Structural Design:** Design for in-plane and out-of-plane shear (AS3700-2018)	

Week 4 - 28 Mar 2022

Module/Topic	Chapter	Events and Submissions/Topic
Lecture 1: Bearing Capacity IV **Lecture 2:** Design of Unreinforced Masonry II **Tutorial 1:** Geotechnical Engineering **Tutorial 2:** Structural Engineering	**Geotechnical Design:** Pile Foundations (continued) **Structural Design:** Design for out-of-plane Bending (AS3700-2018)	

Week 5 - 04 Apr 2022

Module/Topic	Chapter	Events and Submissions/Topic
Lecture 1: Retaining Wall I **Lecture 2:** Design of Unreinforced Masonry III **Tutorial 1:** Geotechnical Engineering **Tutorial 2:** Structural Engineering	**Geotechnical Design:** Retaining Wall **Structural Design:** Design for Compression (AS3700-2018)	

Vacation Week - 11 Apr 2022

Module/Topic	Chapter	Events and Submissions/Topic
Mid-term break		

Week 6 - 18 Apr 2022

Module/Topic	Chapter	Events and Submissions/Topic

Lecture 1: Retaining Wall II **Lecture 2:** Prestressed Concrete Design I **Tutorial 1:** Geotechnical Engineering **Tutorial 2:** Structural Engineering	**Geotechnical Design:** Retaining Wall (continued) **Structural Design:** Introduction to Prestressed Concrete Design	There are two reports to be submitted with various due dates ranging from week 6 to week 11 (please see the project briefing for exact dates)

Week 7 - 25 Apr 2022

Module/Topic	Chapter	Events and Submissions/Topic
Lecture 1: Slope Stability **Lecture 2:** Prestressed Concrete Design II **Tutorial 1:** Geotechnical Engineering **Tutorial 2:** Structural Engineering	**Geotechnical Design:** Slope Stability **Structural Design:** Estimation of Prestress Force and Tendon Profile	

Week 8 - 02 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
Lecture 1: Site Investigation **Lecture 2:** Prestressed Concrete Design III **Tutorial 1:** Geotechnical Engineering **Tutorial 2:** Structural Engineering	**Geotechnical Design:** Site Investigation **Structural Design:** Ultimate Design Checks	There are three reports to be submitted with various due dates ranging from week 8 to week 12 (see the project briefing for exact dates)

Week 9 - 09 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
Lecture 1: Soil Testing - Lab **Lecture 2:** Prestressed Concrete Design IV **Tutorial 1:** Geotechnical Engineering **Tutorial 2:** Structural Engineering	**Geotechnical Design:** Soil Testing - Lab **Structural Design:** Losses in Prestressed Beam	

Week 10 - 16 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
Lecture 1: Tutorials (as required) **Lecture 2:** Tutorials (as required)	Tutorials	

Week 11 - 23 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
Lecture 1: Tutorials (as required) **Lecture 2:** Tutorials (as required)	Tutorials	

Week 12 - 30 May 2022

Module/Topic	Chapter	Events and Submissions/Topic
No lectures in this week		

Review/Exam Week - 06 Jun 2022

Module/Topic	Chapter	Events and Submissions/Topic

Exam Week - 13 Jun 2022

Module/Topic	Chapter	Events and Submissions/Topic

Term Specific Information

Please follow the Unit Website of ENEC14014 for more information.

Assessment Tasks

1 Structural Design Portfolio

Assessment Type
Portfolio

Task Description
The aim of this assessment is to allow the students to demonstrate their understanding of various concepts, theories, software and processes developed in Structural Engineering topics covered in the course. This may include but is not limited to structural analysis, calculation of design actions, concrete and masonry design.
This portfolio contains 2 projects and students are expected to work individually as specified below.
1. Masonry Design – Individual Project [25 marks]
2. Prestressed Concrete (PC) Design – Individual Project [25 marks]
Formal assessment is by submission of a portfolio which contains evidence of all the work that the student has performed throughout the term. Each project may be due on different dates. Students must read each project briefing carefully and follow instructions and time frames as specified to complete the project successfully.
*A **Project Brief*** detailing the requirements for each project, including required pieces of work, will be available on the unit website as below.
1. Masonry Design – Week 1
2. Prestressed Concrete (PC) Design – Week 6

Assessment Due Date

There are two reports to be submitted with various due dates ranging from week 6 to week 11 (please see the project briefing for exact dates)

Return Date to Students

2 weeks from the due date

Weighting
50%

Assessment Criteria
Each main steps in project tasks will be assessed separately for the criterion *accuracy and correct results*.

- Correct application of mathematics and arithmetic
- Reference to correct Standards and/or principles
- Answers clearly identified
- Correct results

In addition, each project as a whole will be assessed against the following criteria:
Evidence of correct procedures

- All necessary steps in the analysis are present in the correct order
- Clear presentation of mathematical and arithmetical working linking given details of the problem to the results obtained
- Evidence of checking results (mathematical, graphical, logic-common sense)

Evidence of the understanding of the topic

- Explanation of choices made in the analysis (why is the procedure required, why this particular procedure)
- Interpretation of results, eg limitations, the direction of vectors

Professional presentation

- The work (job) is clearly identified (problem, data, analysis)
- A clear statement of each problem and its details and requirements
- The logical layout of the analysis
- Appropriate use of diagrams, clear diagrams
- Correct use of terminology, conventions
- Clear English in the explanation of procedure and interpretation of results.

Important: The omission of any of the required items as specified in the **Portfolio Brief** will automatically result in a Fail grade.

Referencing Style

- Harvard (author-date)

Submission
Online Group

Submission Instructions
Please follow the instructions given in the project brief

Learning Outcomes Assessed

- Demonstrate a commitment to ethical practice by promoting principals of sustainable development and awareness of stakeholder requirements
- Determine and justify loads and load combinations for a structural system
- Analyse and design concrete and masonry structural components using appropriate Australian Standards
- Accurately model and analyse structural and geotechnical systems using industry-standard software and Australian Standards.

Graduate Attributes

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

2 Geotechnical design portfolio

Assessment Type
Portfolio

Task Description
The aim of this assessment is to allow the students to demonstrate their understanding of various concepts, theories and processes developed in Geotechnical Engineering topics covered in the program. This may include but is not limited to consolidation, slope stability, site investigation, earth retaining wall and foundation design.
This portfolio contains 2 projects and laboratory reports. Detail of the projects and laboratory tasks are given below. Students are expected to work in a team and/or individually as specified below.
1. Foundation Design – Individual Project [10 marks]
2. Earth Retaining Wall Design – Individual Project [12 marks]
3. Laboratory Report – Individual Reports [8 marks]
Formal assessment is by submission of a portfolio which contains evidence of all the individual work that the student has performed throughout the term. Students must read and follow the guidance and timeline to complete the project successfully.
*A **Portfolio Brief*** detailing the requirements for Portfolio and laboratory instructions will be available on the unit Website as below.
1. Foundation Design – Week 1
2. Earth Retaining Wall Design – Week 6
3. Laboratory Report – Week 6

Assessment Due Date

There are three reports to be submitted with various due dates ranging from week 8 to week 12 (see the project briefing for exact dates)

Return Date to Students

2 weeks from the due date

Weighting
30%

Assessment Criteria
Each main steps in project and laboratory tasks will be assessed separately for the criterion *accuracy and correct results*.

- Correct application of mathematics and arithmetic
- Reference to correct Standards and/or principles
- Answers clearly identified
- Correct results

In addition, each project as a whole will be assessed against the following criteria:
Evidence of correct procedures

- All necessary steps in the analysis are present in the correct order
- Clear presentation of mathematical and arithmetical working linking given details of the problem to the results obtained
- Evidence of checking results (mathematical, graphical, logic-common sense)

Evidence of the understanding of the topic

- Explanation of choices made in the analysis (why is the procedure required, why this particular procedure)
- Interpretation of results, eg limitations, the direction of vectors

Professional presentation

- The work (job) is clearly identified (problem, data, analysis)
- A clear statement of each problem and its details and requirements
- The logical layout of the analysis
- Appropriate use of diagrams, clear diagrams
- Correct use of terminology, conventions
- Clear English in the explanation of procedure and interpretation of results.

Important: The omission of any of the required items as specified in the **Portfolio Brief** will automatically result in a Fail grade.

Referencing Style

- Harvard (author-date)

Submission
Online

Submission Instructions
Please follow the instructions given in the project brief

Learning Outcomes Assessed

- Demonstrate a commitment to ethical practice by promoting principals of sustainable development and awareness of stakeholder requirements
- Describe and apply site investigation and geotechnical testing techniques to characterise sites and geotechnical materials based on Australian Standards
- Analyse and design foundations and earth retaining structures and assess stability of slopes
- Accurately model and analyse structural and geotechnical systems using industry-standard software and Australian Standards.

Graduate Attributes

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

3 Oral Examination (Viva)

Assessment Type
Oral Examination

Task Description
At the end of the term, an oral examination (viva) will be scheduled for each student. Students must be prepared to answer questions raised by the facilitator/lecturer. The questions will be based on project and laboratory work as well as all the topics covered in this unit. Due to the nature of the assessment item, each question will be marked either satisfactory or unsatisfactory.
All oral examination will be recorded for assessment review purpose and may be stored up to 3 months (or as required by DDLT) after the release of the grades.

Assessment Due Date

Individual time for each student will be notified in week 10

Return Date to Students

Feedback will be released only on Grade certification date

Weighting
20%

Minimum mark or grade
50% from the oral examination (student MUST pass each structural and geotechnical oral examinations separately)

Assessment Criteria
Each question in the oral examination will be assessed separately for the criterion *accuracy, comprehension and correct understanding of the principles*.

- Explanation of choices made in the analysis or design (why is the procedure required, why this particular procedure)
- Interpretation of results, eg limitations, the direction of vectors
- Ability to use the knowledge in similar and/or less-complex scenarios
- Ability to answer questions on software used

Each question will be marked either satisfactory or unsatisfactory based on the answer given by the student. The satisfactory answer will be marked as 1 and the unsatisfactory answer will be marked as 0. Then it will be converted to final marks with direct scale.
Example: If a total number of questions = 10 and a student answered 7 questions correctly, then he answered 70% of the questions correctly. Therefore, the student will get 0.7x20 = 14 marks for this assessment item.

Referencing Style

- Harvard (author-date)

Submission
No submission method provided.

Submission Instructions
Please follow the instructions given in the project brief

Learning Outcomes Assessed

- Determine and justify loads and load combinations for a structural system
- Analyse and design concrete and masonry structural components using appropriate Australian Standards
- Describe and apply site investigation and geotechnical testing techniques to characterise sites and geotechnical materials based on Australian Standards
- Analyse and design foundations and earth retaining structures and assess stability of slopes

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