

## In Progress

Please note that this Unit Profile is still in progress. The content below is subject to change.



# **ENEM14015 *Dynamic System Modelling and Control***

## **Term 2 - 2025**

Profile information current as at 05/09/2024 01:16 pm

All details in this unit profile for ENEM14015 have been officially approved by CQUiversity 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

This project-based learning unit examines the behaviour of mechanical systems. You will apply knowledge of engineering science and mathematics to model and analyse mechanical systems and consider the nature of engineering assumptions, and the effects of uncertainty on modelling and analysis. You will apply vibration and control theory, design and analyse linear and non-linear mathematical models and use simulation software to predict the behaviour of mechanical systems in the industry. You will have opportunities to work individually and in teams to complete projects and to develop interpersonal and technical communication skills. You will prepare professional documentation of problem solutions and project reports. Online students are required to have access to a computer. 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

Pre-requisites: (ENEM12007 Statics and Dynamics or ENEM12010 Engineering Dynamics) and MATH12225 Applied Computational Modelling

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 - 2025

- 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).

### 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

Information for Class and Assessment Overview has not been released yet.

This information will be available on Monday 19 May 2025

## 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 Unit comments.

##### **Feedback**

Extremely high workload and many assignment questions follow on from other questions making it hard if the first question is unsolved.

##### **Recommendation**

Strategies to support students commencing the team assessment earlier in the term should be developed to properly distribute the work and begin cooperation among the team members.

#### Feedback from UC reflection.

##### **Feedback**

Most students do not look at the assessment items until the last minute. Hence, they have trouble working as a team keeping some busy and some idle raising dissatisfaction.

##### **Recommendation**

Authentic practical engineering examples relevant to the theoretical contents should be provided throughout the term.

#### Feedback from Course committee meeting feedback.

##### **Feedback**

The unit received low score in useful knowledge/skills category.

##### **Recommendation**

Authentic practical engineering examples relevant to the theoretical contents students learn need to be repeated throughout the term.

## Unit Learning Outcomes

Information for Unit Learning Outcomes has not been released yet.

This information will be available on Monday 19 May 2025

## Alignment of Learning Outcomes, Assessment and Graduate Attributes

Information for Alignment of Learning Outcomes, Assessment and Graduate Attributes has not been released yet.

This information will be available on Monday 19 May 2025

## Textbooks and Resources

Information for Textbooks and Resources has not been released yet.

This information will be available on Monday 23 June 2025

## Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.

This unit profile has not yet been finalised.