In Progress

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

ENEE12016 *Signals and Systems*

Term 2 - 2026

Profile information current as at 05/02/2025 07:44 pm

All details in this unit profile for ENEE12016 have been officially approved by CQUniversity and represent a learning partnership between the University and you (our student).The information will not be changed unless absolutely necessary and any change will be clearly indicated by an approved correction included in the profile.

General Information

Overview

Electrical systems are fundamental to our way of life, including electrical power, telecommunications, and automatic control systems. In this unit, you will learn mathematical techniques to analyse and design a wide range of electrical systems, such as communication, electrical power distribution, and transmission and control systems. You will be introduced to the concept of linear time-invariant systems and several mathematical tools used for system analysis, especially electrical system analysis, such as forward and inverse Laplace transforms, s-domain circuit analysis, and transfer function. You will also be introduced to the frequency response of a system, identify filter types, and design filters for given specifications. Through this unit, you will gain programming experience in using simulation software to analyse signals and linear systems. This unit will provide you with the opportunities to further develop communication skills through developing technical documentation and reports. All students must have access to a computer, frequently use the Internet, and complete the compulsory practical activities. Furthermore, the unit also aims to promote the UN sustainable development Goal 9 - Build resilient infrastructure, promote inclusive and sustainable industrialisation, and foster innovation by developing an understanding of how to build resilient and sustainable automation and intelligence systems to support industrial innovation.

Details

Career Level: *Undergraduate*
Unit Level: *Level 2*
Credit Points: *6*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.125*

Pre-requisites or Co-requisites

Pre-requisite: ENEE12014 Electrical Circuit Analysis
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 - 2026

- 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 18 May 2026

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 Unit survey

Feedback
The lectures and tutorials are very long, making them hard to learn in one go.

Recommendation
Break the lectures and tutorials into sizable chunks based on logical concepts and topics to allow easier digestion of materials.

Feedback from Unit survey

Feedback
A computational modelling maths unit perhaps should be a prerequisite and provided to better prepare students for using Matlab in this unit.

Recommendation
Discuss with the School management to make MATH12225 - Applied Computational Modelling a prerequisite for the unit.

Feedback from Unit survey

Feedback
The textbook while very thorough is very cumbersome to get through.

Recommendation
Consider replacing the current textbook with a new one that focuses more on practical guidance rather than theoretical rigorousness and abstraction.

Feedback from Unit survey

Feedback
Although very comprehensive, the assessment workload was very high. Especially since the labs were too long, they took significant time to do, affecting the available valuable learning time for the lectures and tutorials.

Recommendation
Revise assessments and labs to streamline and reduce the length and the number of pieces without compromising on their thoroughness.

Unit Learning Outcomes

Information for Unit Learning Outcomes has not been released yet.
This information will be available on Monday 18 May 2026

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 18 May 2026

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.
This information will be available on Monday 22 June 2026

Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.
This unit profile has not yet been finalised.