ENEE20002 *Advanced Electrical Machines and Drives*
Term 1 - 2025

Profile information current as at 23/11/2024 01:05 am

General Information

Overview

The objective of this unit is to introduce you to advanced electrical machines, drives and their control. You will learn about dynamic modelling of various types of DC and AC electrical machines. The unit will also introduce you to space vector theory associated with dynamic modelling of AC electrical machines. You will also learn about DC and AC motor drives. The unit will enable you to apply vector control fundamentals in electrical machine control. You will also learn some advanced topics such as speed-sensorless control of electrical machines. You will be required to successfully complete an electrical machines and drives design team project. Online students will be required to attend a compulsory residential school in order to complete the laboratory experiments. Prior knowledge of the fundamental concepts of electrical circuit analysis and electrical power engineering is assumed.

Details

Career Level: *Postgraduate*
Unit Level: *Level 9*
Credit Points: *12*
Student Contribution Band: *8*
Fraction of Full-Time Student Load: *0.25*

Pre-requisites or Co-requisites

ENEE14007 Electrical Machines and Drives Applications is an Anti-Requisite for this unit.
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 - 2025

- Melbourne
- Online
- 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 13 January 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 Unit Evaluation Report

Feedback
Students indicated that they got useful learning resources (as PDF documents)

Recommendation
The use of industry-relevant resources should be continued in the next offering.

Feedback from Unit Evaluation Report

Feedback
Students highlighted that they are happy with the clarity and support for the unit

Recommendation
Industry-relevant resources should be provided for better understanding in the next offering.

Feedback from Unit Evaluation Report

Feedback
Student expected further clarification on few topics.

Recommendation
More detail explanations should be provided with real life examples.

Unit Learning Outcomes

Information for Unit Learning Outcomes has not been released yet.
This information will be available on Monday 13 January 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 13 January 2025

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.
This information will be available on Monday 17 February 2025

Academic Integrity Statement

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