In Progress

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

ENEE12015 *Electrical Power Engineering*

Term 2 - 2025

Profile information current as at 13/11/2024 07:21 pm

General Information

Overview

In this unit, you will model basic electrical power system components using simplified linear equivalent circuits, explain the relationship between power and energy, and calculate power and energy in electrical power networks. You will review electric and magnetic fields and explain their application in power transformers and generation. You will discuss generation, transmission, and distribution of electrical energy. You will apply problem-solving techniques in the analysis of balanced three-phase power circuits using per-unit methodology. You will discuss electrical distribution system components and configurations and apply appropriate mathematical tools to the analysis of power systems. You are expected to use appropriate electrical engineering language in context and to document the process of modeling and analysis. You will present the information, 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 Moodle site for proposed dates.

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-requisites: ENAE12013 Electrical Components and Circuit Analysis or 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 - 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 Unit evaluation.

Feedback
Students appreciated the lecturer for this unit was very cooperative, knowledgeable, and encouraged with a positive learning atmosphere.

Recommendation
Continue this good practice for student success.

Feedback from Unit evaluation.

Feedback
Students appreciated that the Quizzes were good and helped maintain attention to the subject material.

Recommendation
Continue this good practice.

Feedback from Unit evaluation and individual discussion.

Feedback
Students mentioned that the simulation software (MATLAB) to evaluate solar cell configurations took a bit longer time to understand the software. Requested a tutorial on this software.

Recommendation
Should provide a tutorial on this software (MATLAB).

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.