

In Progress

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



ENEG11009 *Fundamentals of Sustainable Energy*

Term 3 - 2025

Profile information current as at 27/09/2024 10:12 am

All details in this unit profile for ENEG11009 have been officially approved by CQU University 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

Sustainable engineering practices and climate change are critical topics in current socio-economic and political settings. Meeting the world's energy demand through renewable energy sources and exploring carbon-free alternative energy sources are the highly sought-after solutions. In this unit, you will learn how to apply fundamental laws of physics related to energy and electricity to solve engineering problems. You will also learn the concepts of voltage, and current and use Kirchhoff's laws to analyse simple direct current (DC) circuits, and learn the fundamentals of alternating currents (AC). This unit also investigates current and future sustainable energy sources comprising solar, wind, hydro, and hydrogen, and relevant production processes. This unit also explores the effects of climate change on using renewable energy and the challenges faced in integrating renewable energy into the primary grid. This unit will promote progress toward the United Nation's Sustainable Development Goal 7 - Affordable and Clean Energy.

Details

Career Level: *Undergraduate*

Unit Level: *Level 1*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

There are no requisites 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 3 - 2025

- Online

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 15 September 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

Feedback

Students found it difficult to coordinate with team members to complete team project-based assessments.

Recommendation

The suitability of team-based assessment should be assessed.

Feedback from SUTE

Feedback

Learning material needs improvement and needs structure.

Recommendation

Learning resources should be reviewed and more organised.

Feedback from In-class discussion

Feedback

Progressive quizzes provided a good way to self-check progress and provide an understanding of the content.

Recommendation

This practice should be continued.

Feedback from SUTE

Feedback

Some students found it difficult to understand the content's relevance to the degree.

Recommendation

Unit content should be reviewed.

Feedback from SUTE

Feedback

Students need more detailed feedback on assessments

Recommendation

Detailed feedback should be given to assessments.

Unit Learning Outcomes

Information for Unit Learning Outcomes has not been released yet.

This information will be available on Monday 15 September 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 15 September 2025

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.

This information will be available on Monday 20 October 2025

Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.

This unit profile has not yet been finalised.