In Progress

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



ENEM14011 Energy Conversion Term 1 - 2026

Profile information current as at 22/01/2025 08:51 pm

All details in this unit profile for ENEM14011 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

This unit introduces the key concepts and principles required to analyse problems involving heat transfer and energy conversion. You will analyse and design heat exchangers and analyse the performance of internal combustion engines, gas turbines, and jet engines. You will analyse the combustion processes of fuels, including hydrogen, estimate pollutant emissions, and analyse and design nozzles. You will prepare professional documents that demonstrate critical evaluation of results. You will be required to show your ability to work effectively to solve problems and communicate your work clearly in a professional manner.

Details

Career Level: Undergraduate Unit Level: Level 4 Credit Points: 6 Student Contribution Band: 8 Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Prereq: ENEM13014 Thermodynamics or ENEM12003 Thermodynamics

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 <u>Assessment Policy and</u> <u>Procedure (Higher Education Coursework)</u>.

Offerings For Term 1 - 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.

Information for Class and Assessment Overview has not been released yet. This information will be available on Monday 12 January 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 <u>CQUniversity Policy site</u>.

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

More contemporary topics, such as Hydrogen, need to be added to the topics in addition to petrol/diesel engines.

Recommendation

Unit coordinator to discuss with Head of Course about incorporating hydrogen in curriculum. Options of including hydrogen combustion in the unit should be explored.

Feedback from Class discussion

Feedback

Assessment criteria for practical assessment could be improved by introducing marking rubrics.

Recommendation

Ways to introduce marking rubrics for assessments and to provide more effective feedback should be explored.

Feedback from Class discussion

Feedback

The unit delivery was structured and coherent.

Recommendation

This practice should be continued.

Unit Learning Outcomes

Information for Unit Learning Outcomes has not been released yet. This information will be available on Monday 12 January 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 12 January 2026

Textbooks and Resources

Information for Textbooks and Resources has not been released yet. This information will be available on Monday 16 February 2026

Academic Integrity Statement

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