In Progress

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



ENTA13025 Sustainable Energy for Aviation Term 2 - 2025

Profile information current as at 22/11/2024 09:37 pm

All details in this unit profile for ENTA13025 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

Aerospace vehicles are powered using a range of energy sources. The design of current aircraft power plants needs to minimise the impact of air travel on the environment while improving passenger safety, comfort and costs. In this unit, you will learn the fundamentals of various types of combustion engines and the parameters that affect their performance. You will also be introduced to the various forms of renewable energy such as solar, wind and hydrogen, and energy storage systems such as batteries and fuel cells, focusing on their applicability in the aviation context. You will build on your knowledge of propulsion systems and learn about strategies to improve the efficiency of jet engines. This unit will also cover future fuels and energy sources, engine emission standards and improving the sustainability of air travel through harnessing waste energy and minimising engine emissions.

Details

Career Level: Undergraduate Unit Level: Level 3 Credit Points: 6 Student Contribution Band: 8 Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Prerequisite: Gas Turbine Engines 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 2 - 2025

- 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 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 <u>CQUniversity Policy site</u>.

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.