

In Progress

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



AVAT11005 *Flight Fundamentals*

Term 1 - 2027

Profile information current as at 09/09/2026 03:02 am

All details in this unit profile for AVAT11005 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

Aircraft require an array of mechanical, structural, and electrical components to ensure safe, comfortable, and efficient transport of passengers and goods across the world. In this unit, you will learn the fundamental physics concepts that govern aircraft design and performance. You will study the laws of motion and the concepts of momentum and energy conversion to develop your knowledge of the various power sources used by aircraft and how these power sources propel aircraft forward. You will learn about fluid dynamics and gravitational forces to help understand the lift and aerodynamics of aircraft. You will learn about electrical circuits and wave propagation, which are the basic concepts behind numerous aircraft systems from autopilot to navigation systems to communication systems to inflight entertainment systems. In this unit, you will learn to use an E6B or CR3 calculator as necessary for flight-related calculations. Finally, you will also combine your knowledge of these concepts to perform calculations relevant to flight planning, performance, and loading of aircraft.

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 1 - 2027

- Cairns
- 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 11 January 2027

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
- Academic Progression Policy and Procedure
- Student Refund and Credit Balance Policy and Procedure
- 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 Coordinator observation and based on tutorial participation.

Feedback

The student would benefit from more practice applying concepts to problems and visualising abstract processes.

Recommendation

More guided, tutorial-style practice and expanded use of animations and interactive simulations should be provided.

Unit Learning Outcomes

Information for Unit Learning Outcomes has not been released yet.
This information will be available on Monday 11 January 2027

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 11 January 2027

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.
This information will be available on Monday 15 February 2027

Academic Integrity Statement

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