#### In Progress

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



# **AVAT11005** *Flight Fundamentals* Term 3 - 2024

Profile information current as at 14/05/2024 03:50 pm

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, will 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. Finally, you will 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 <u>Assessment Policy and</u> <u>Procedure (Higher Education Coursework)</u>.

## Offerings For Term 3 - 2024

- 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.

Information for Class and Assessment Overview has not been released yet. This information will be available on Monday 9 September 2024

## **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 Have your say comments

#### Feedback

This unit needs an overhaul in terms of relevance to the aviation industry practices.

#### Recommendation

Update the unit content to present relevant physics content in the context of how they apply to the operation of an aircraft.

#### Feedback from Have your say comments

#### Feedback

This unit needs revision in terms of applicable theories relevant to the aviation industry.

#### Recommendation

Assessments are not relevant to aviation - Update the unit assessment to include problem-solving in an aviation context.

## **Unit Learning Outcomes**

Information for Unit Learning Outcomes has not been released yet. This information will be available on Monday 9 September 2024

## 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 9 September 2024

Textbooks and Resources

Information for Textbooks and Resources has not been released yet. This information will be available on Monday 14 October 2024

Academic Integrity Statement

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