



# AVAT12012 Instrument Flight Rules and Procedures

## Term 2 - 2019

Profile information current as at 02/10/2022 02:26 pm

All details in this unit profile for AVAT12012 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

Instrument Flight Rules and Procedures will provide you with the knowledge of instrument flight rules and procedures that are required for the issue of the Command Instrument Rating (CIR). You will cover the aeronautical knowledge requirements of the Civil Aviation Safety Authority's Instrument Rating syllabus. You will study the operational knowledge required of a Command Instrument Rating and the meteorological conditions which categorise Instrument Meteorological Conditions (IMC). You will also study small commercial aircraft Instrument Flight Rules flight planning including the use of space and ground-based instrument systems. You will also learn the principles of performance-based navigation including area navigation and required navigation performance.

### Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

Prerequisites: AVAT12009 Navigation (Commercial Pilot Licence); AVAT12008 Meteorology (Commercial Pilot Licence) and AVAT11006 Aviation Law

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 2 - 2019

- Bundaberg
- 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

### Recommended Student Time Commitment

Each 6-credit Undergraduate unit at CQUniversity requires an overall time commitment of an average of 12.5 hours of study per week, making a total of 150 hours for the unit.

### Class Timetable

#### [Regional Campuses](#)

Bundaberg, Cairns, Emerald, Gladstone, Mackay, Rockhampton, Townsville

#### [Metropolitan Campuses](#)

Adelaide, Brisbane, Melbourne, Perth, Sydney

### Assessment Overview

#### 1. **Online Quiz(zes)**

Weighting: 40%

#### 2. **Examination**

Weighting: 60%

### Assessment Grading

This is a graded unit: your overall grade will be calculated from the marks or grades for each assessment task, based on the relative weightings shown in the table above. You must obtain an overall mark for the unit of at least 50%, or an overall grade of 'pass' in order to pass the unit. If any 'pass/fail' tasks are shown in the table above they must also be completed successfully ('pass' grade). You must also meet any minimum mark requirements specified for a particular assessment task, as detailed in the 'assessment task' section (note that in some instances, the minimum mark for a task may be greater than 50%). Consult the [University's Grades and Results Policy](#) for more details of interim results and final grades.

## 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 Self reflection

##### Feedback

Greater student involvement in the learning process.

##### Recommendation

Offer a series of quizzes and have the students pull together to answer each question.

## Unit Learning Outcomes

### On successful completion of this unit, you will be able to:

1. Describe general operations and procedures related to the Instrument Rating
2. Reflect on procedures for flight under the instrument flight rules
3. Critically evaluate an Instrument Flight Rules flight plan
4. Explain the use of ground and space based navigation systems
5. Discuss the principle and use of performance-based navigation
6. Reflect on the human factors issues related to Instrument Meteorological Conditions.

N/A

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	6
1 - Online Quiz(zes) - 40%	•	•	•	•	•	•
2 - Examination - 60%	•	•	•	•	•	•

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
1 - Communication	•	•	•	•	•	•
2 - Problem Solving	•	•	•	•	•	•
3 - Critical Thinking		•	•	•	•	•

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
4 - Information Literacy	•	•	•	•	•	•
5 - Team Work						
6 - Information Technology Competence					•	
7 - Cross Cultural Competence						
8 - Ethical practice		•	•			•
9 - Social Innovation						
10 - Aboriginal and Torres Strait Islander Cultures						

### Alignment of Assessment Tasks to Graduate Attributes

Assessment Tasks	Graduate Attributes									
	1	2	3	4	5	6	7	8	9	10
1 - Online Quiz(zes) - 40%	•	•	•	•				•		
2 - Examination - 60%	•	•	•			•				

## Textbooks and Resources

### Textbooks

AVAT12012

#### Supplementary

##### Instrument Rating

Authors: Robson, David  
Aviation Theory Centre Pty Ltd  
Brisbane , QLD , Australia  
ISBN: 9781875537051  
Binding: Paperback  
AVAT12012

#### Supplementary

##### Instrument Rating Study Guide

Authors: Tait, Bob  
Bob Tait's Aviation Theory School  
Brisbane , Queensland , Australia  
Binding: Paperback

#### Additional Textbook Information

Reference documents include:

- Civil Aviation Regulation (CAR)
- Civil Aviation Orders (CAO) Parts 20 to 95.2
- AIP Book, including AIP SUP
- En Route Supplement Australia (ERSA) with RDS
- DAPs East and West

### IT Resources

**You will need access to the following IT resources:**

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)

## Referencing Style

All submissions for this unit must use the referencing style: [American Psychological Association 6th Edition \(APA 6th edition\)](#)

For further information, see the Assessment Tasks.

## Teaching Contacts

**Arno Mueckenhausen** Unit Coordinator  
[a.mueckenhausen@cqu.edu.au](mailto:a.mueckenhausen@cqu.edu.au)

## Schedule

### Week 1 - 15 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
Instruments	Chapter 1	Lecture and tutorial
Meteorology	Chapter 2	Quizzes 1 and 2 at appointed time

**Week 2 - 22 Jul 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Radar NDB and ADF	chapter 3 chapter 4	Lecture and tutorial

**Week 3 - 29 Jul 2019**

Module/Topic	Chapter	Events and Submissions/Topic
VOR DME	Chapter 5 Chapter 6	Lecture and tutorial Quizzes 3 and 4 at appointed time

**Week 4 - 05 Aug 2019**

Module/Topic	Chapter	Events and Submissions/Topic
ILS Pilot qualifications and suitability	Chapter 7 Chapter 8	Lecture and tutorial

**Week 5 - 12 Aug 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Australian aviation documents Preparing for an IFR flight	Chapter 9 Chapter 10	Lecture and tutorial

**Vacation Week - 19 Aug 2019**

Module/Topic	Chapter	Events and Submissions/Topic
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**Week 6 - 26 Aug 2019**

Module/Topic	Chapter	Events and Submissions/Topic
IFR Departures En-route Operations	Chapter 11 Chapter 12	Lecture and Tutorial Quizzes 5 and 6 at appointed time

**Week 7 - 02 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
IFR arrivals Holding patterns, reversals and DME arcs	Chapter 13 Chapter 14	Lecture and tutorial Quizzes 7 and 8 at appointed time

**Week 8 - 09 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Instrument Approaches Visual Manoeuvring	Chapter 15 Chapter 16	Lecture and tutorial

**Week 9 - 16 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Instrument Flying Technique Abnormal Operations	Chapter 17 Chapter 18	Lecture and tutorial Quizzes 9 and 10 at appointed time  <b>Quizzes Due:</b> Week 9 Tuesday (17 Sept 2019) 11:00 pm AEST

**Week 10 - 23 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
Automatic Flight Systems Performance-Based Navigation	Chapter 19 Chapter 20	Lecture

**Week 11 - 30 Sep 2019**

Module/Topic	Chapter	Events and Submissions/Topic
RNAV Systems	Chapter 21	Lecture and tutorial

**Week 12 - 07 Oct 2019**

Module/Topic	Chapter	Events and Submissions/Topic
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Human Factors	Chapter 22	Lecture and tutorial
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### Review/Exam Week - 14 Oct 2019

Module/Topic	Chapter	Events and Submissions/Topic
Q & A Revision	All chapters	Lecture

### Exam Week - 21 Oct 2019

Module/Topic	Chapter	Events and Submissions/Topic
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## Assessment Tasks

### 1 Quizzes

#### Assessment Type

Online Quiz(zes)

#### Task Description

Quizzes over the first 10 weeks. Two quizzes to be completed at appointed times.

#### Number of Quizzes

10

#### Frequency of Quizzes

Other

#### Assessment Due Date

Week 9 Tuesday (17 Sept 2019) 11:00 pm AEST

Every appointed Tuesday

#### Return Date to Students

Week 9 Tuesday (17 Sept 2019)

Immediate after each quiz completion

#### Weighting

40%

#### Assessment Criteria

No Assessment Criteria

#### Referencing Style

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)

#### Submission

Online

#### Learning Outcomes Assessed

- Describe general operations and procedures related to the Instrument Rating
- Reflect on procedures for flight under the instrument flight rules
- Critically evaluate an Instrument Flight Rules flight plan
- Explain the use of ground and space based navigation systems
- Discuss the principle and use of performance-based navigation
- Reflect on the human factors issues related to Instrument Meteorological Conditions.

#### Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Ethical practice

### Examination

#### Outline

Complete an invigilated examination.

**Date**

During the examination period at a CQUniversity examination centre.

**Weighting**

60%

**Length**

120 minutes

**Exam Conditions**

Closed Book.

**Materials**

Calculator - non-programmable, no text retrieval, silent only

Dictionary - non-electronic, concise, direct translation only (dictionary must not contain any notes or comments).

## Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

**What is a breach of academic integrity?**

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

**Why is academic integrity important?**

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

**Where can I get assistance?**

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

**What can you do to act with integrity?**





**Be Honest**

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own



**Seek Help**

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)



**Produce Original Work**

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem