



AVAT12012 Instrument Flight Rules and Procedures

Term 2 - 2020

Profile information current as at 02/10/2022 02:18 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 - 2020

- 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. **Online Test**

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 Student Feedback

Feedback

The best aspects about the unit were the quizzes given for ten weeks to help understand the material needed for Instrument Flight Rules, the communication with the unit coordinator was very easy and helpful and the material given for each week's lecture.

Recommendation

Will be continued

Feedback from Student feedback

Feedback

The lecturer is clearly knowledgeable of the subject matter and was able to draw upon his time in the airlines. His practical based examples are very useful to aid understanding and provides context. The presentation slides contain graphs, images and videos - also assisting in understanding.

Recommendation

Will be continued

Feedback from Student feedback

Feedback

The lecturer is able to encourage group discussion during his lectures, which is beneficial for learning.

Recommendation

Will be continued

Feedback from Student feedback

Feedback

The best aspects about the unit were the quizzes given for ten weeks to help understand the material needed for Instrument Flight Rules, the communication with the unit coordinator was very easy and helpful and the material given for each week's lecture.

Recommendation

The quizzes will be continued

Feedback from Self reflection

Feedback

Overall quiz quality needs to be improved

Recommendation

Quizzes will be altered

Feedback from Self reflection

Feedback

Offer an additional lecture by a guest speaker from Australian Air Traffic Control

Recommendation

In progress

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 - Online Test - 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		•	•	•	•	•	
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 - Online Test - 60%	•	•	•			•				

Textbooks and Resources

Textbooks

AVAT12012

Prescribed

Instrument Rating

(2018)

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

If you prefer to study with a paper copy, they can be purchased at the CQUni Bookshop here: <http://bookshop.cqu.edu.au> (search on the Unit code). eBooks can be purchased at the publisher's website.

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 7th Edition \(APA 7th edition\)](#)

For further information, see the Assessment Tasks.

Teaching Contacts

Arno Mueckenhausen Unit Coordinator

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Aruna Ranganathan Unit Coordinator

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Schedule

Week 1 - 13 Jul 2020

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 - 20 Jul 2020

Module/Topic	Chapter	Events and Submissions/Topic
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Radar NDB and ADF	chapter 3 chapter 4	Lecture and tutorial
Week 3 - 27 Jul 2020		
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 - 03 Aug 2020		
Module/Topic	Chapter	Events and Submissions/Topic
ILS Pilot qualifications and suitability	Chapter 7 Chapter 8	Lecture and tutorial
Week 5 - 10 Aug 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Australian aviation documents Preparing for an IFR flight	Chapter 9 Chapter 10	Lecture and tutorial
Vacation Week - 17 Aug 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Week 6 - 24 Aug 2020		
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 - 31 Aug 2020		
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 - 07 Sep 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Instrument Approaches Visual Manoeuvring	Chapter 15 Chapter 16	Lecture and tutorial
Week 9 - 14 Sep 2020		
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
Week 10 - 21 Sep 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Automatic Flight Systems Performance-Based Navigation	Chapter 19 Chapter 20	Lecture
Week 11 - 28 Sep 2020		
Module/Topic	Chapter	Events and Submissions/Topic
RNAV Systems	Chapter 21	Lecture and tutorial
Week 12 - 05 Oct 2020		
Module/Topic	Chapter	Events and Submissions/Topic
Human Factors	Chapter 22	Lecture and tutorial
Review/Exam Week - 12 Oct 2020		
Module/Topic	Chapter	Events and Submissions/Topic

Q & A
Revision

All chapters

Lecture

Final Online end of the term test
Due: Review/Exam Week Monday (12
Oct 2020) 11:45 pm AEST

Exam Week - 19 Oct 2020

Module/Topic

Chapter

Events and Submissions/Topic

Assessment Tasks

1 Online Quizzes

Assessment Type

Online Quiz(zes)

Task Description

There will be ten online quizzes over the first 8 to 10 weeks of lectures to be completed weekly.

Number of Quizzes

10

Frequency of Quizzes

Weekly

Assessment Due Date**Return Date to Students****Weighting**

40%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

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

2 Final Online end of the term test

Assessment Type

Online Test

Task Description

2 hour online test held during exam weeks. You must achieve 70% or more to pass the test.

Assessment Due Date

Review/Exam Week Monday (12 Oct 2020) 11:45 pm AEST

Return Date to Students**Weighting**

60%

Minimum mark or grade

70%

Assessment Criteria

No Assessment Criteria

Referencing Style

- [American Psychological Association 7th Edition \(APA 7th edition\)](#)

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 Technology Competence

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