

In Progress

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



COIT12213 *Applied Artificial Intelligence*

Term 2 - 2026

Profile information current as at 21/05/2026 12:11 am

All details in this unit profile for COIT12213 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

Artificial Intelligence (AI) involves developing systems that are autonomous and intelligent. This unit introduces you to contemporary and emerging AI technologies to address problems such as medical diagnosis, manufacturing optimisation and transport scheduling. You will investigate the application of AI technologies in areas such as computer vision, machine learning and deep learning. Fundamental AI concepts will be considered, including artificial neural networks and model validation techniques. You will develop AI systems using industry tools and learn to develop a business case for an AI system.

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

Pre-requisite: COIT11222 Programming Fundamentals

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 - 2026

- Brisbane
- Melbourne
- Online
- Rockhampton
- Sydney

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

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 Unit coordinator's reflection

Feedback

The current design of Assignment 1 does not adequately reflect the applied and analytical nature of the Applied Artificial Intelligence.

Recommendation

At present, Assessment 1 is designed as an online quiz, which may not effectively evaluate students' depth of understanding and conceptual application in Applied Artificial Intelligence. It is recommended that this task be redesigned as a practical, coding-based assessment to more accurately measure students' applied knowledge, analytical thinking, and problem-solving capabilities.

Feedback from Unit coordinator's reflection

Feedback

Assignments 2 and 3 could be strengthened in terms of assessment rigour. The current format may not fully capture students' depth of understanding.

Recommendation

Incorporate a viva or presentation component into Assignments 2 and 3 to more effectively assess students' conceptual understanding. This will allow markers to directly assess each student's understanding, confirm authorship of their work, and enhance the overall rigour and integrity of the assessment process.

Unit Learning Outcomes

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

1. Select Artificial Intelligence (AI) techniques to solve authentic problems including social innovation challenges
2. Apply industry tools to solve AI problems
3. Critique business cases for AI systems against social and ethical frameworks.

The Australian Computer Society (ACS) recognises the Skills Framework for the Information Age (SFIA). SFIA provides a consistent definition of ICT skills. SFIA is adopted by organisations, governments, and individuals in many countries and is increasingly used when developing job descriptions and role profiles.

ACS members can use the tool MySFIA to build a skills profile at <https://www.acs.org.au/professionalrecognition/mysfia-b2c.html>.

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This unit contributes to the following workplace skills as defined by [SFIA 7](#) (the SFIA code is included)

- Analytics (INAN)
- Systems design (DESN)
- Data modelling and design (DTAN)
- Programming/Software Development (PROG)

Alignment of Learning Outcomes, Assessment and Graduate Attributes

— N/A Level  Introductory Level  Intermediate Level  Graduate Level  Professional Level  Advanced Level

Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks

Learning Outcomes

	1	2	3
1 - Online Quiz(zes) - 35%	•		
2 - Group Work - 30%		•	•
3 - Written Assessment - 35%	•	•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes

Learning Outcomes

	1	2	3
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 - First Nations Knowledges			
11 - 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	11
1 - Online Quiz(zes) - 35%		•	•	•		•					
2 - Group Work - 30%	•	•	•	•	•	•	•	•	•		
3 - Written Assessment - 35%	•	•	•	•		•	•	•	•		

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.
This information will be available on Monday 22 June 2026

Academic Integrity Statement

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