In Progress

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



Profile information current as at 05/02/2025 06:24 pm

All details in this unit profile for COIT20277 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) is transforming the way we interact with technology, enabling machines to think, learn, and adapt in ways that mimic human intelligence. From intelligent chatbots to autonomous robotics, AI is becoming an essential part of our everyday lives and has the potential to transform entire industries. This unit introduces the core concepts of AI, starting with foundational principles and real-world applications. You will explore key machine learning approaches, including both supervised and unsupervised learning, and examine advanced topics such as reinforcement learning, classical and heuristic search strategies, and deep learning, with a focus on convolutional and recurrent neural networks for tasks like image classification and natural language processing. Additionally, you will examine ethical AI practices, addressing the societal impact of AI and the importance of ensuring fairness, transparency, and accountability in AI systems. The unit also covers cutting-edge trends like cloud-based AI and AI at the edge, which are shaping the future of AI deployment. Through programming and problem-based assessments, you will gain both theoretical knowledge and practical skills in modern AI technologies.

Details

Career Level: Postgraduate

Unit Level: Level 9
Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Pre-requisite: COIT20245 Introduction to Programming

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 - 2026

- Brisbane
- Melbourne
- Online
- 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

Information for Class and Assessment Overview has not been released yet.

This information will be available on Monday 12 January 2026

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 Student Feedback

Feedback

Some students find it difficult to understand Particle Swarm Optimisation (PSO) and genetic programming.

Recommendation

A use case with sample coding will be helpful.

Feedback from Unit Coordinator Reflection

Feedback

Python is a more appropriate industry-standard programming language to prepare industry-ready graduates in Al.

Recommendation

Introduce Python and Cloud Technology to Solve Al Problems as per unit update plan.

Unit Learning Outcomes

Information for Unit Learning Outcomes has not been released yet.

This information will be available on Monday 12 January 2026

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 12 January 2026

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.

This information will be available on Monday 16 February 2026

Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.

This unit profile has not yet been finalised.