

In Progress

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



COIT13229 *Applied Distributed Systems*

Term 1 - 2025

Profile information current as at 23/11/2024 07:53 pm

All details in this unit profile for COIT13229 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

Modern computer systems commonly rely on distributed and cloud computing systems, which enable seamless access to networked resources such as processors, data stores, sensor networks, cyber-physical systems, and multimedia services. In this unit, you will gain foundation knowledge, and an understanding of the system models and their enabling technologies. You will learn the core concepts of distributed computing, such as interprocess communication, concurrency and synchronisation, transactions and concurrency control as well as distributed databases and files. This unit also exposes you to distributed system characteristics of scalability, heterogeneity, security, and failure handling. The areas of mobile and ubiquitous computing and the social impact arising from the ubiquity of distributed systems will also be explored. You will learn to develop secure and reliable distributed computing applications and web services that can perform concurrent operations across multiple computers.

Details

Career Level: *Undergraduate*

Unit Level: *Level 3*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

Pre-requisites or Co-requisites

Prerequisites: COIT12200 and COIT11237.

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 - 2025

- Brisbane
- Cairns
- 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

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

This information will be available on Monday 13 January 2025

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 In-class student feedback

Feedback

Students are keen to learn new technologies in distributed systems, such as edge computing and advanced security.

Recommendation

Consider the introduction of Edge computing technology as part of the planned major update of this unit for 2025.

Feedback from Unit Coordinator self reflection

Feedback

More content on security is needed in this unit.

Recommendation

Consider adding more security-related topics such as mutual authentication, and symmetrical/asymmetrical cryptography as part of the planned major update of this unit for 2025.

Unit Learning Outcomes

Information for Unit Learning Outcomes has not been released yet.

This information will be available on Monday 13 January 2025

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 13 January 2025

Textbooks and Resources

Information for Textbooks and Resources has not been released yet.

This information will be available on Monday 17 February 2025

Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.

This unit profile has not yet been finalised.