

In Progress

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



COIT29223 Blockchain Technologies for Sustainable Business Applications

Term 2 - 2022

Profile information current as at 14/12/2025 03:40 pm

All details in this unit profile for COIT29223 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

Blockchain is a decentralised digital ledger with a growing list of records called blocks, which contain timestamp data, cryptographic information and transaction details. The use of blockchain technologies in cryptocurrency has grown rapidly in recent years. Besides cryptocurrencies in the financial industry, the potential for blockchain technologies in other industries is huge. In terms of achieving sustainability, blockchain has the ability to drive business process efficiency and transparency across industries, which in turn ensures better usage of resources and creates value. This unit will introduce you to the fundamentals and impact of blockchain technologies on businesses, relevant architectures, blockchain applications, and security implications. This unit aims to provide you with a solid theoretical foundation while also providing you with an opportunity to develop your own blockchain application for solving a real-world sustainability problem in relation to one of social, economic, environmental or technological issues.

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: COIT20246

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 - 2022

- 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 Postgraduate 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. **Written Assessment**

Weighting: 25%

2. **Presentation**

Weighting: 20%

3. **Group Work**

Weighting: 55%

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 evaluation

Feedback

Some students struggled to develop their Blockchain solution.

Recommendation

Provide resources on Blockchain development tools and continue to demonstrate Blockchain tools during tutorials.

Unit Learning Outcomes

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

1. Evaluate key concepts of blockchain technologies
2. Analyse the benefits of blockchain technologies and their applications for promoting sustainability
3. Evaluate the legal, regulatory and ethical concerns in relation to blockchain technologies
4. Critically analyse infrastructure and tools for building blockchain applications
5. Develop a blockchain application that solves a real-world sustainability problem
6. Evaluate future directions and industry outlooks on blockchain technology and its role in sustainability.

The Australian Computer Society (ACS) recognises the Skills Framework for the Information Age (SFIA). SFIA is adopted by organisations, governments and individuals in many countries and provides a widely used and consistent definition of ICT skills. SFIA is increasingly being used when developing job descriptions and role profiles. ACS members can use the tool [MySFIA](#) to build a skills profile.

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

Sustainability Management (SUMI)

Business Process Improvement (BPRI)

Innovation (INOV)

Information Security (SCTY)

IT Management (ITMG)

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	4	5	6
1 - Written Assessment - 25%	•	•		•		•
2 - Presentation - 20%	•	•	•	•	•	
3 - Group Work - 55%			•		•	•

Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes					
	1	2	3	4	5	6
1 - Knowledge	◦	◦	◦	◦	◦	◦
2 - Communication	◦	◦	◦	◦	◦	◦
3 - Cognitive, technical and creative skills	◦	◦	◦	◦	◦	◦
4 - Research	◦	◦	◦	◦	◦	◦
5 - Self-management		◦				◦
6 - Ethical and Professional Responsibility			◦			◦
7 - Leadership			◦		◦	◦
8 - 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
1 - Written Assessment - 25%	◦	◦	◦	◦	◦	◦		
2 - Presentation - 20%	◦	◦	◦	◦	◦			
3 - Group Work - 55%	◦	◦	◦	◦	◦	◦		

Textbooks and Resources

Textbooks

COIT29223

Prescribed

COMMERCIALIZING BLOCKCHAIN: STRATEGIC APPLICATIONS IN THE REAL WORLD
(2019)

Authors: Antony Welfare

John Wiley & Sons

ISBN: 978-1-119-57801-7

Binding: Hardcover

[View textbooks at the CQUniversity Bookshop](#)

IT Resources

You will need access to the following IT resources:

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

Referencing Style

Information for Referencing Style has not been released yet.

This unit profile has not yet been finalised.

Teaching Contacts

Information for Teaching Contacts has not been released yet.

This unit profile has not yet been finalised.

Schedule

Information for Schedule has not been released yet.

This unit profile has not yet been finalised.

Assessment Tasks

Information for Assessment Tasks has not been released yet.

This unit profile has not yet been finalised.

Academic Integrity Statement

Information for Academic Integrity Statement has not been released yet.

This unit profile has not yet been finalised.