In Progress

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

COIT13240 *Applied Cryptography*

Term 1 - 2025

Profile information current as at 22/11/2024 12:15 am

All details in this unit profile for COIT13240 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

In this unit, you will learn techniques for securing information and communications against adversaries, in particular with regards to confidentiality, integrity and authentication. Informed by the history of cryptography, you will learn the cryptographic primitives that are used to secure information today such as symmetric key encryption, message authentication codes, public key cryptography and digital signatures. You will also study future issues in cryptography, including the challenges raised by quantum computing. While you will learn and use basic mathematics, this unit will focus on cryptographic concepts relevant to cyber security specialists, rather than the mathematical underpinnings of the algorithms. This practical treatment of cryptography will be highlighted in laboratory tasks, where you will use software to attack and secure information in various realistic scenarios.

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

Pre-requisite: COIT12202 Network Security Concepts
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 Student evaluations

Feedback
Tests are stressful due to level of difficulty, high stakes, and variety of topics covered in short time.

Recommendation
Reduce the weight of the tests in the unit, adding more focus on the practical activities in the project and journal.

Feedback from Student evaluations

Feedback
The quality of the learning materials was appreciated, however the time needed to study the content covered is high.

Recommendation
Continue with the diverse set of learning materials, but incorporate more guidance on depth of understanding needed of each topic, e.g. via more quiz questions for self-assessment.

Feedback from Unit Coordinator reflection

Feedback
Active use of GitHub and Teams for group work usually leads to higher quality project outcomes.

Recommendation
Demonstrate the benefits of GitHub and Teams for teamwork early in the term and allocate more marks to their use for the project.

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.