



# COIT20265 Networks and Information Security Project

## Term 2 - 2019

Profile information current as at 30/04/2024 04:20 pm

All details in this unit profile for COIT20265 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

This unit is the capstone to the Networks and Information Security specialisation of the Master of Information Technology course. You are required to demonstrate the skills that you have developed throughout your specialisation, and apply these skills to an authentic task group network security project including the design and technology implementation of a network security plan that meets client's requirements. As part of a work portfolio, you will be required to produce project management artefacts typical of a commercial network security project.

### Details

Career Level: *Postgraduate*

Unit Level: *Level 9*

Credit Points: 12

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.25

### Pre-requisites or Co-requisites

Prerequisites COIT20262 Advanced Network Security COIT20263 Information Security Management COIT20264 Network Design PPMP20007 Project Management 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 2 - 2019

- 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 12-credit Postgraduate unit at CQUniversity requires an overall time commitment of an average of 25 hours of study per week, making a total of 300 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. **Report**

Weighting: 40%

#### 2. **Portfolio**

Weighting: 20%

#### 3. **Written Assessment**

Weighting: 20%

#### 4. **Presentation**

Weighting: 20%

### 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 Student unit evaluation

##### **Feedback**

As a capstone, students are conscientious of the volume of tasks of the project and consequently appreciate the self-study, group work and research aspects of the unit.

##### **Recommendation**

Make sure project tasks are constructively aligned with assessment and learning objectives. Continue promoting research and self-study designing and developing authentic learning tasks.

#### Feedback from Student unit evaluation.

##### **Feedback**

Students perceive this unit required them to use all the knowledge they have obtained through previous units of study in the course.

##### **Recommendation**

Continue developing authentic (real-world) case studies where students are required to use all knowledge gained in previous units.

## Unit Learning Outcomes

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

1. Apply the concepts learned in network security specialisation units informed by research and professional best-practice
2. Assess systems for security exposures; and accordingly, select and implement appropriate countermeasures and controls
3. Plan and manage a network security project, particularly the prioritisation of tasks, scheduling of time and resources, and the generation of supporting documentation
4. Review and critically evaluate team and individual performance, reflecting on the processes followed and identifying areas for continuous improvement
5. Communicate effectively by using written and oral presentation, understanding the needs of various stakeholders
6. Demonstrate productive participation and contribution to a project team or work environment.

Australian Computer Society (ACS) recognises the Skills Framework for the Information Age (SFIA). SFIA is in use in over 100 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 at

<https://www.acs.org.au/professionalrecognition/mysfia-b2c.html>

This unit contributes to the following workplace skills as defined by SFIA. The SFIA code is included:

1. Project Management (PRMG)
2. IT Management (ITMG)
3. Information Security (SCTY)
4. Security Administration (SCAD)
5. IT Governance (GOVN)
6. Technical specialism (TECH)
7. IT Infrastructure (ITOP)
8. Systems Installation/Decommissioning (HSIN)
9. Network Support (NTAS)
10. Network Planning (NTPL)
11. Network Design (NTDS)
12. System Design (DESN).
13. Penetration testing (PENT)
14. Information Assurance (INAS)

## Alignment of Learning Outcomes, Assessment and Graduate Attributes

 N/A Level	 Introductory Level	 Intermediate Level	 Graduate Level	 Professional Level	 Advanced Level
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### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes					
	1	2	3	4	5	6
1 - Report - 40%	•	•	•		•	
2 - Portfolio - 20%				•		•
3 - Written Assessment - 20%	•	•	•	•		
4 - Presentation - 20%					•	•

### 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 - Report - 40%	○	○	○	○		○		
2 - Portfolio - 20%		○	○		○	○		
3 - Written Assessment - 20%		○		○	○		○	

Assessment Tasks	Graduate Attributes							
	1	2	3	4	5	6	7	8
<b>4 - Presentation - 20%</b>		○	○		○		○	

## Textbooks and Resources

### Textbooks

**There are no required textbooks.**

#### Additional Textbook Information

There are no required textbooks.

### IT Resources

**You will need access to the following IT resources:**

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

## Referencing Style

**All submissions for this unit must use the referencing styles below:**

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)
- [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

## Teaching Contacts

**Edilson Arenas** Unit Coordinator  
[e.arenas@cqu.edu.au](mailto:e.arenas@cqu.edu.au)

## Schedule

### Week 1 - 15 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
Introduction to project by mentor Form project groups	No prescribed textbooks for this unit	Make entries in the Portfolio covering activities performed in this week

### Week 2 - 22 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
Weekly meeting with the project mentor	No prescribed textbooks for this unit	Make entries in the Portfolio covering activities performed in this week
Project selection		

### Week 3 - 29 Jul 2019

Module/Topic	Chapter	Events and Submissions/Topic
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Weekly meeting with the project mentor

No prescribed textbooks for this unit

Make entries in the Portfolio covering activities performed in this week

#### **Week 4 - 05 Aug 2019**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

Weekly meeting with the project mentor

No prescribed textbooks for this unit

1. Make entries in the Portfolio covering activities performed in this week  
2. Submit a Project Plan  
3. Submit and present Progress Report-1

#### **Week 5 - 12 Aug 2019**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

Weekly meeting with the project mentor

No prescribed textbooks for this unit

1. Make entries in the Portfolio covering activities performed in this week  
2. Show your portfolio to your mentor for feedback (required)

#### **Vacation Week - 19 Aug 2019**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

#### **Week 6 - 26 Aug 2019**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

Weekly meeting with the project mentor

No prescribed textbooks for this unit

1. Make entries in the Portfolio covering activities performed in this week  
2. Submit and present Progress Report-2

#### **Week 7 - 02 Sep 2019**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

Weekly meeting with the project mentor

No prescribed textbooks for this unit

Make entries in the Portfolio covering activities performed in this week

#### **Week 8 - 09 Sep 2019**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

Weekly meeting with the project mentor

No prescribed textbooks for this unit

1. Make entries in the Portfolio covering activities performed in this week  
2. Submit and present Progress Report-3

#### **Week 9 - 16 Sep 2019**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

Weekly meeting with the project mentor

No prescribed textbooks for this unit

1. Make entries in the Portfolio covering activities performed in this week  
2. Show your portfolio to your mentor for feedback (required)

#### **Week 10 - 23 Sep 2019**

**Module/Topic**

**Chapter**

**Events and Submissions/Topic**

Weekly meeting with the project mentor	No prescribed textbooks for this unit	1. Make entries in the Portfolio covering activities performed in this week 2. Submit and present Progress Report-4
<b>Week 11 - 30 Sep 2019</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Weekly meeting with the project mentor	No prescribed textbooks for this unit	1. Make entries in the Portfolio covering activities performed in this week 2. Group Project Presentation
<b>Week 12 - 07 Oct 2019</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
Weekly meeting with the project mentor	No prescribed textbooks for this unit	1. Submit Portfolio 2. Submit FINAL Project Report 3. Group Project DEMO
		<b>Project Report and Technical Implementation</b> Due: Week 12 Friday (11 Oct 2019) 11:45 pm AEST <b>Portfolio</b> Due: Week 12 Friday (11 Oct 2019) 11:45 pm AEST
<b>Review/Exam Week - 14 Oct 2019</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
	No exam	
<b>Exam Week - 21 Oct 2019</b>		
<b>Module/Topic</b>	<b>Chapter</b>	<b>Events and Submissions/Topic</b>
	No exam	

## Term Specific Information

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## Assessment Tasks

### 1 Project Report and Technical Implementation

#### Assessment Type

Report

#### Task Description

This is a practical activity that requires demonstration of the implementation of your network and security plan. You must identify key threats and challenges, and implement technology to address them. The technology has to address key challenges to the network environment. You are required to submit the technical documentation including network analysis and design, security risk analysis, test plan, test results and any network security policies and/or procedures

that result from your implementation test.

**Assessment Due Date**

Week 12 Friday (11 Oct 2019) 11:45 pm AEST

**Return Date to Students**

On certification day

**Weighting**

40%

**Assessment Criteria**

The project report and technical documentation will be assessed upon the quality of the content. This includes the presentation layout and the depth and breadth of your project recommendations adhering to the implementation of a secured computer network.

Note: Please refer to the unit website in Moodle for further information and detailed marking criteria.

**Referencing Style**

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)
- [Harvard \(author-date\)](#)

**Submission**

Online Group

**Submission Instructions**

Please refer to Moodle for further instructions

**Learning Outcomes Assessed**

- Apply the concepts learned in network security specialisation units informed by research and professional best-practice
- Assess systems for security exposures; and accordingly, select and implement appropriate countermeasures and controls
- Plan and manage a network security project, particularly the prioritisation of tasks, scheduling of time and resources, and the generation of supporting documentation
- Communicate effectively by using written and oral presentation, understanding the needs of various stakeholders

**Graduate Attributes**

- Knowledge
- Communication
- Cognitive, technical and creative skills
- Research
- Ethical and Professional Responsibility

## 2 Portfolio

**Assessment Type**

Portfolio

**Task Description**

This is an individual task. Use your portfolio to capture things like:

1. Activities that you performed during the week
2. Your contributions to the overall project requirements
3. Challenges faced
4. Reflections and experiences in conducting the project
5. Bibliography such as technical journals, websites, trade magazines, etc. you used to support your work

**Assessment Due Date**

Week 12 Friday (11 Oct 2019) 11:45 pm AEST

**Return Date to Students**

On certification day



**Weighting**

20%

**Assessment Criteria**

You are required to submit your portfolio in week 12 for assessment; however, it is essential to maintain this document throughout the term as it is the only component of the unit assessed individually. Failure to submit a portfolio will disadvantage your overall marks. We recommend to make entries in the portfolio on each occasion you undertake work on the project for personal reflections and lessons learned. You are expected to make a portfolio entry at least once a week. Periodically, you are required to show your portfolio to your mentor to receive feedback on the quality of the content, and the overall look and feel of it.

The Moodle site provides further information and specific marking criteria.

**Referencing Style**

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)
- [Harvard \(author-date\)](#)

**Submission**

Online

**Submission Instructions**

Please refer to Moodle for further instructions

**Learning Outcomes Assessed**

- Review and critically evaluate team and individual performance, reflecting on the processes followed and identifying areas for continuous improvement
- Demonstrate productive participation and contribution to a project team or work environment.

**Graduate Attributes**

- Communication
- Cognitive, technical and creative skills
- Self-management
- Ethical and Professional Responsibility

### 3 Project Plan and Project Progress Reports

**Assessment Type**

Written Assessment

**Task Description**

This group assessment comprises two items:

1. Project Plan due in week 4
2. Four progress reports due in weeks 4, 6, 8, and 10

**Assessment Due Date**

See exact dates in Moodle

**Return Date to Students**

Assessment returned two weeks after submission. See exact dates in Moodle

**Weighting**

20%

**Assessment Criteria****Project plan (12 marks)**

Due: Friday, Week 4

You are required to submit a project plan outlining the project scope, objectives, constraints, statement of work, project team members, RACI matrix, GANTT Chart, project risks, and proposed mitigation plan.

**Periodic Project Progress Reports (four reports @ 2 marks each for a total of 8 marks)**

Due: Fridays, Week 4, 6, 8, and 10

This is a group assessment.

Each group must submit four periodic project progress reports using a standard template provided on the unit website in Moodle.

On-campus students: Each member of your group MUST give an in-class presentation of each project progress report.

Distant or Flexible students: The Unit Coordinator will provide you with the necessary instructions to present your group's periodic progress reports.

### **Referencing Style**

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)
- [Harvard \(author-date\)](#)

### **Submission**

Online Group

### **Submission Instructions**

Please refer to Moodle for further instructions

### **Learning Outcomes Assessed**

- Apply the concepts learned in network security specialisation units informed by research and professional best-practice
- Assess systems for security exposures; and accordingly, select and implement appropriate countermeasures and controls
- Plan and manage a network security project, particularly the prioritisation of tasks, scheduling of time and resources, and the generation of supporting documentation
- Review and critically evaluate team and individual performance, reflecting on the processes followed and identifying areas for continuous improvement

### **Graduate Attributes**

- Communication
- Research
- Self-management
- Leadership

## **4 Group Project Presentation**

### **Assessment Type**

Presentation

### **Task Description**

Each group must present their projects in a plenary session in week 11 of the term. This is followed by a project demonstration in week 12.

### **Assessment Due Date**

Please refer to Moodle for exact dates

### **Return Date to Students**

On certification day

### **Weighting**

20%

### **Assessment Criteria**

Each member of the group must submit their group's PowerPoint slides through the appropriate link in Moodle. Please refer to the unit website in Moodle for detailed information about the project presentation (week 11), project demonstration (week 12), and marking criteria.

On-campus students: The date and time will be determined by your local lecturer/tutor.

Distant students: The time and technology employed will be determined on an individual basis.

### **Referencing Style**

- [American Psychological Association 6th Edition \(APA 6th edition\)](#)
- [Harvard \(author-date\)](#)

### **Submission**

Online Group

### Submission Instructions

Please refer to Moodle for further instructions

### Learning Outcomes Assessed

- Communicate effectively by using written and oral presentation, understanding the needs of various stakeholders
- Demonstrate productive participation and contribution to a project team or work environment.

### Graduate Attributes

- Communication
- Cognitive, technical and creative skills
- Self-management
- Leadership

## Academic Integrity Statement

As a CQUniversity student you are expected to act honestly in all aspects of your academic work.

Any assessable work undertaken or submitted for review or assessment must be your own work. Assessable work is any type of work you do to meet the assessment requirements in the unit, including draft work submitted for review and feedback and final work to be assessed.

When you use the ideas, words or data of others in your assessment, you must thoroughly and clearly acknowledge the source of this information by using the correct referencing style for your unit. Using others' work without proper acknowledgement may be considered a form of intellectual dishonesty.

Participating honestly, respectfully, responsibly, and fairly in your university study ensures the CQUniversity qualification you earn will be valued as a true indication of your individual academic achievement and will continue to receive the respect and recognition it deserves.

As a student, you are responsible for reading and following CQUniversity's policies, including the [Student Academic Integrity Policy and Procedure](#). This policy sets out CQUniversity's expectations of you to act with integrity, examples of academic integrity breaches to avoid, the processes used to address alleged breaches of academic integrity, and potential penalties.

### What is a breach of academic integrity?

A breach of academic integrity includes but is not limited to plagiarism, self-plagiarism, collusion, cheating, contract cheating, and academic misconduct. The Student Academic Integrity Policy and Procedure defines what these terms mean and gives examples.

### Why is academic integrity important?

A breach of academic integrity may result in one or more penalties, including suspension or even expulsion from the University. It can also have negative implications for student visas and future enrolment at CQUniversity or elsewhere. Students who engage in contract cheating also risk being blackmailed by contract cheating services.

### Where can I get assistance?

For academic advice and guidance, the [Academic Learning Centre \(ALC\)](#) can support you in becoming confident in completing assessments with integrity and of high standard.

### What can you do to act with integrity?

**Be Honest**

If your assessment task is done by someone else, it would be dishonest of you to claim it as your own

**Seek Help**

If you are not sure about how to cite or reference in essays, reports etc, then seek help from your lecturer, the library or the Academic Learning Centre (ALC)

**Produce Original Work**

Originality comes from your ability to read widely, think critically, and apply your gained knowledge to address a question or problem