



# COIT12208 ICT Project Management

## Term 1 - 2023

Profile information current as at 06/12/2023 02:48 pm

All details in this unit profile for COIT12208 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 key concepts of Information and Communication Technology Project Management from both a traditional waterfall and Agile perspective. You will apply project management principles and use project management software with the aim of delivering successful projects. Industry standards, quality assurance, professional ethics, social, cultural, and legal issues relevant to the theories and principles of project management will also be covered.

### Details

Career Level: *Undergraduate*

Unit Level: *Level 2*

Credit Points: 6

Student Contribution Band: 8

Fraction of Full-Time Student Load: 0.125

### Pre-requisites or Co-requisites

Pre-requisite: COIT11226 Systems Analysis Anti-requisite: COIS13064 ICT Project Management

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 - 2023

- Brisbane
- Cairns
- Melbourne
- Online
- Rockhampton
- Sydney
- Townsville

### 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 Undergraduate 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. **Presentation**

Weighting: 30%

#### 2. **Online Quiz(zes)**

Weighting: 30%

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

Weighting: 40%

### 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**

Students expressed high satisfaction with the unit content and structure.

**Recommendation**

Continue to run the unit with the current style and format.

#### Feedback from Unit Coordinator self-reflection and students' verbal feedback

**Feedback**

Too much work for 15% in Assessment 2 Quiz 1.

**Recommendation**

Revise Assessment 2 Quiz 1 and reduce the number of questions.

## Unit Learning Outcomes

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

1. Apply Agile project scoping, scheduling, and velocity management tools and procedures
2. Apply predictive project planning, scheduling, and resource management tools and procedures
3. Evaluate project status and recommend appropriate corrective action where necessary
4. Assess the ethical, social, cultural, and legal impacts of projects on diverse stakeholders.

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 following version 7 SFIA codes are included:

- [Strategic planning](#) ITSP
- [Business analysis](#) BUAN
- [Project management](#) PRMG
- [Programme management](#) PGMG
- [Portfolio management](#) POMG
- [Change management](#) CHMG
- [Requirements definition and management](#) REQM
- [Information systems coordination](#) ISCO
- [Systems development management](#) DLMG

## Alignment of Learning Outcomes, Assessment and Graduate Attributes



### Alignment of Assessment Tasks to Learning Outcomes

Assessment Tasks	Learning Outcomes			
	1	2	3	4
1 - Presentation - 30%	•			•
2 - Online Quiz(zes) - 30%		•	•	•
3 - Written Assessment - 40%	•	•	•	

### Alignment of Graduate Attributes to Learning Outcomes

Graduate Attributes	Learning Outcomes			
	1	2	3	4
1 - Communication	•			•
2 - Problem Solving	•	•	•	
3 - Critical Thinking	•	•	•	•
4 - Information Literacy				
5 - Team Work				
6 - Information Technology Competence	•	•	•	
7 - Cross Cultural Competence				
8 - Ethical practice				•
9 - Social Innovation				
10 - 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	9	10
1 - Presentation - 30%	•	•	•			•				
2 - Online Quiz(zes) - 30%		•	•			•		•		
3 - Written Assessment - 40%		•	•							

## Textbooks and Resources

### Textbooks

**There are no required textbooks.**

#### Additional Textbook Information

Textbooks can be accessed online at the CQUniversity Library website. If you prefer your own copy, you can purchase either paper or eBook versions at the CQUni Bookshop here: <http://bookshop.cqu.edu.au> (search on the Unit code)

### IT Resources

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

- CQUniversity Student Email
- Internet
- Unit Website (Moodle)
- Microsoft Project
- Webcam and headset
- Access to Microsoft Visio
- Access to Microsoft Office
- Taiga server
- Node.js including JSHint, c8 and sloc

## Referencing Style

All submissions for this unit must use the referencing style: [Harvard \(author-date\)](#)

For further information, see the Assessment Tasks.

## Teaching Contacts

**Rahat Hossain** Unit Coordinator

[m.hossain@cqu.edu.au](mailto:m.hossain@cqu.edu.au)

## Schedule

### 1 Introduction - 06 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
ICT project management concepts	<p>The weekly readings are available via the unit website:</p> <ul style="list-style-type: none"><li>• Part 1 Introduction and Overview (Haugan 2010). Haugan, GT 2010. <i>Project management fundamentals: key concepts and methodology</i>, 2nd edn, Oakland, Berrett-Hoehler.</li><li>• Pp. 26-42 of 2 Scrum and eXtreme programming (Hunt 2018). Hunt, A 2018. <i>PMI-ACP project management institute agile certified practitioner exam study guide</i>.</li><li>• Pp. 115-128 of 4 Agile Initiation and Stakeholder Engagement (Hunt 2018)</li></ul>	

### 2 Agile - 13 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
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Agile scope, schedule and risk management

- Pp. 180-189 of 6 Agile Estimation and Planning (Hunt 2018)
- Pp. 218-223 of 7 Effective Team Performance on Agile Projects (Hunt 2018)

### 3 Risks - 20 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
Prioritisation of ICT risks and assessment of risk responses	<ul style="list-style-type: none"> <li>• 4 Teams (Lientz &amp; Larssen 2006). Lientz, BP &amp; Larssen, L 2006. <i>Risk management for IT projects: how to deal with over 150 issues and risks</i>, Routledge.</li> </ul>	

### 4 Quality - 27 Mar 2023

Module/Topic	Chapter	Events and Submissions/Topic
Assessment using ICT metrics, Pareto charts and Fault Tree Analysis	<ul style="list-style-type: none"> <li>• 8 Project Quality Management (PMI 2013). PMI 2013, <i>Software extension to the PMBOK guide</i>. 5th edn, Project Management Institute.</li> </ul>	

### 5 Predictive Scope & Schedule - 03 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
Modelling of ICT scenarios in MS Project	<ul style="list-style-type: none"> <li>• 5 Developing the Schedule (Gido 2018). Gido, J 2018. <i>Successful project management</i>. 7th ed., Cengage.</li> </ul>	<b>ADAPTIVE PM PRESENTATION</b> Due: Week 5 Friday (7 Apr 2023) 11:00 pm AEST

### Non-teaching Week - 10 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
	Non-teaching week	

### 6 Predictive Resourcing, COCOMO, PERT & Monte Carlo - 17 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
Improving the estimation of ICT task durations	<ul style="list-style-type: none"> <li>• No specific chapter from any specific textbook. Custom made lecture slides are available on the Moodle unit website where the references are provided at the end of the lecture slides.</li> </ul>	<b>Quiz 1</b> <ul style="list-style-type: none"> <li>• Due Week: Week 6</li> <li>• Due Day: Sunday</li> <li>• Due Time: 11.00 PM</li> <li>• Date: 23/04/2023 11.00 PM</li> </ul>

### 7 Predictive Costs including Earned Value Management - 24 Apr 2023

Module/Topic	Chapter	Events and Submissions/Topic
Evaluation of a project's schedule and costs	<ul style="list-style-type: none"> <li>• 7 Determining Costs, Budget and Earned Value (Gido 2018)</li> </ul>	

### 8 Costs & timelines of Agile projects; Lean & Kanban - 01 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
Costs & timelines of Agile projects; Lean & Kanban	<ul style="list-style-type: none"> <li>• 3 Key Aspects of Additional Agile Methodologies (Hunt 2018)</li> </ul>	

### 9 Stakeholders & Organisational Structures - 08 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
Designing development organisational structures based on ICT systems architectures	<ul style="list-style-type: none"> <li>• No specific chapter from any specific textbook. Custom made lecture slides are available on the Moodle unit website where the references are provided at the end of the lecture slides.</li> </ul>	<b>Quiz 2</b> <ul style="list-style-type: none"> <li>• Due Week: Week 9</li> <li>• Due Day: Sunday</li> <li>• Due Time: 11.00 PM</li> <li>• Date: 14/05/2023 11.00 PM</li> </ul>

### 10 Managing Risk - 15 May 2023

Module/Topic	Chapter	Events and Submissions/Topic

Managing Risk

- 8 Managing Risk (Gido 2015). Gido, J 2015. *Successful project management*. 6th ed., Cengage.

### 11 Closing the Project - 22 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
Closing the Project	• 9 Closing the Project (Gido 2015). Gido, J 2015. <i>Successful project management</i> . 6th ed., Cengage.	

### 12 Industry Guest Speaker Session - 29 May 2023

Module/Topic	Chapter	Events and Submissions/Topic
Industry Guest Speaker Session	• Industry Guest Speaker Session	Complete the Unit evaluation. Click the "Have your say" red button on the Moodle website.  <b>Case Study</b> Due: Week 12 Friday (2 June 2023) 11:00 pm AEST

### Review/Exam Week - 05 Jun 2023

Module/Topic	Chapter	Events and Submissions/Topic
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### Exam Week - 12 Jun 2023

Module/Topic	Chapter	Events and Submissions/Topic
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## Term Specific Information

**Unit Coordinator:** Rahat Hossain  
Building 30/1.12, Rockhampton Campus  
Email: m.hossain@cqu.edu.au (Preferred Contact)  
Telephone: +617 4923 2068

## Assessment Tasks

### 1 ADAPTIVE PM PRESENTATION

#### Assessment Type

Presentation

#### Task Description

The assignment is individually assessed. This is a condensed version of the assignment. Please refer to the unit website for the full version.

#### Objectives

The aim of this assignment is for you to gain adaptive project management experience. You will act as the project manager for an adaptive ICT project. You will need to perform tasks such as the following:

- Create and maintain a product backlog
- Develop a sprint plan
- Manage risk issues and
- Present a sprint review.

The project is expected to run for 2 sprints. The first sprint has already been completed; you will review the first sprint and plan the second sprint.

#### 1. Create a plan to reflect project progress

You will be provided with a rough project plan and development files of an ICT project representing progress made in the project at the end of its first sprint, that is, Sprint 1. You will need to create a plan using the specified project management tool to reflect the project status at the end of Sprint 1.

#### 2. Create Sprint 2 Plan

You need to create a plan for Sprint 2.

#### 3. Present Sprint 1 Review and Sprint 2 Plan

You will present a review of Sprint 1 and your Sprint 2 plan.

You will have 10-15 minutes to present your project. You must record and submit your presentation and the taiga project file (\*.json). Your recorded video should be framed to include the presenter, your audience (if any), and your desktop.

### **Plagiarism**

Sharing ideas about project management concepts and techniques between individuals is encouraged. Any ideas you reuse should be referenced. Sharing project management files or copying, for example, user stories, subtasks, issues, or controls, between individuals will be considered plagiarism. If you doubt whether you can share something, first obtain email consent from your lecturer.

**This assignment will be submitted online through the Moodle unit website.**

**The full specification for this assessment and the marking criteria are available on the Moodle unit website.**

### **Assessment Due Date**

Week 5 Friday (7 Apr 2023) 11:00 pm AEST

All submissions are due by the deadline.

### **Return Date to Students**

Week 7 Friday (28 Apr 2023)

Within 2 weeks of the due date or within 2 weeks of submission (whichever is the later)

### **Weighting**

30%

### **Assessment Criteria**

The assignment is individually assessed. The assessment marking criteria include proper implementation and appropriate presentation of aspects such as Backlog, User Stories, Sprint Plans, Taskboard, Issues, Individual Presence, and Presentation Content. A detailed marking template will be available along with the assignment details on the unit website.

### **Referencing Style**

- [Harvard \(author-date\)](#)

### **Submission**

Online

### **Submission Instructions**

Extract your project plan from the project management tool and submit your plan to the unit website. You are to submit your video or a link to your video along with the taiga project file (\*.json). Plagiarism will be dealt with according to University policy. Your assignment might be assigned a zero grade or reported for further action. Incomplete submissions, for example, due to insufficient permissions or corrupt files, might not be marked or a late penalty might be applied. Students who do not present will receive no mark for the presentation components of the assessment.

### **Learning Outcomes Assessed**

- Apply Agile project scoping, scheduling, and velocity management tools and procedures
- Assess the ethical, social, cultural, and legal impacts of projects on diverse stakeholders.

### **Graduate Attributes**

- Communication
- Problem Solving
- Critical Thinking
- Information Technology Competence

## **2 Quizzes**

### **Assessment Type**

Online Quiz(zes)

### **Task Description**

This is a condensed version of the assignment. Please refer to the unit website for the full version.

### **Time Management**

Please complete the unit's activities up to and including Week 4 before attempting Quiz 1. You will be able to finish Quiz 1 after completing the unit's Week 5 activities. You are encouraged to use the non-teaching week between Weeks 5 and 6 to finalise Quiz 1.

Please complete the unit's activities up to and including Week 7 before attempting Quiz 2. You will be able to finish Quiz 2 after completing the unit's Week 8 activities. You are encouraged to use the weekend at the end of Week 8 to finalise Quiz 2.



## Objectives

The aim of this assignment is for you to gain experience with quality and risk management and predictive project management. You are to complete project management tasks for a collection of project scenarios and simulations.

## Task Description

You will manage project constraints such as quality, risk, scope, schedule, human resources and stakeholders using, for example, MS Project and MS Excel. You will create recommendations to proactively manage or correct project issues. You will complete scenarios such as the following:

- Model scenarios using MS Project
- Manage to schedule using the Critical Path Method (CPM).
- Manage quality using Fault Tree Analysis (FTA)
- Create and interpret control charts
- Calculate Risk Leverage Factors to assess the cost of risk responses
- Calculate Expected Monetary Values (EMV not EVM) to assess risk responses
- Calibrate a COCOMO model to predict the duration of a project
- Apply PERT and Monte Carlo to better understand a project's duration and
- Manage schedule and costs with Earned Value Management (EVM) techniques

The scenarios will be distributed to you in two quizzes.

## Quiz 1

- Attempts: Although multiple submissions are possible, only the last submission of Quiz 1 will be marked.
- Feedback: You will receive feedback for Quiz 1 two weeks after the due date.
- Availability: Quiz 1 will be available by Week 4.
- Weight: Quiz 1 is worth 15% of the unit.

## Quiz 2

- Attempts: You have unlimited attempts at Quiz 2 until the deadline, only the last submission of Quiz 2 will be marked.
- Feedback: Quiz 2 feedback is provided after each submission of the quiz.
- Availability: Quiz 2 will be available by Week 7.
- Weight: Quiz 2 is worth 15% of the unit.

## Plagiarism

The assignment is individually assessed. Sharing of any files related to this assignment will be considered plagiarism. All your submissions may be checked for plagiarism.

## Number of Quizzes

2

## Frequency of Quizzes

Other

## Assessment Due Date

The quizzes have different due dates. Quiz 1 is due on Week 6, Sunday, 11.00 PM. Quiz 2 is due on Week 9, Sunday, 11.00 PM.

## Return Date to Students

Quiz 1 feedback will be returned in Week 8. Quiz 2 feedback is provided after each submission of the quiz. Feedback and marks for either quiz might be altered by the moderation process.

## Weighting

30%

## Assessment Criteria

The assignment is individually assessed. You will be assessed on aspects such as the following. Most of the criteria will be weighted similarly. Refer to the quizzes for question weights. Some criteria such as those related to *Scope and schedule management in MS Project*; and *Managing costs using EVM* will be more heavily weighted.

Criteria	Description
Calculating risk leverage factors to assess the cost-effectiveness of risk responses	Correct calculations
Create or interpret a decision tree and calculate expected monetary values to assess risk response options	Correct analysis of the scenario. Correct calculations. Appropriate interpretation of results.

Focus quality management through Fault Tree Analysis	Correct analysis of the scenario and calculations
Identify issues with testing and development processes by calculating defect rates	Appropriate interpretation and recommendations. Correct calculations.
Collect ICT project metrics such as defect rates, SLOC and cyclomatic complexity	Correct metrics collected and identified.
Focus code reviews through analysis of cyclomatic complexity	The correct interpretation of the scenario and general and specific function recommendations.
Predict the number of escaped bugs in a system	The correct interpretation of the scenario and correct calculations.
Develop or interpret run charts and control charts to analyse trends in project metrics, e.g. defect rates and requirements volatility	Appropriate interpretation and recommendations. Recommendations consider the context of the project. Trend lines only include relevant data. Correct calculations. Charts have appropriate titles, legends and units. Charts use correct data.
Focus quality management by developing and interpreting Pareto charts	Appropriate interpretation and recommendations. The analysis is specific to the generated results. Correct calculations. Charts have appropriate titles, legends and units. Charts use correct data.

### Referencing Style

- [Harvard \(author-date\)](#)

### Submission

Online

### Submission Instructions

The quizzes need to be completed on the unit website. You will upload files and type answers inside the quizzes.

### Learning Outcomes Assessed

- Apply predictive project planning, scheduling, and resource management tools and procedures
- Evaluate project status and recommend appropriate corrective action where necessary
- Assess the ethical, social, cultural, and legal impacts of projects on diverse stakeholders.

### Graduate Attributes

- Problem Solving
- Critical Thinking
- Information Technology Competence
- Ethical practice

## 3 Case Study

### Assessment Type

Written Assessment

### Task Description

The assignment is individually assessed. This assessment is worth 40% of the total available marks for this unit. The aims of this assessment are for you to respond to a case study. Details of the case study, a description of the task and the requirements will be made available on the unit website. If you have any questions in regards to this assessment you should consult your local Lecturer or Unit Coordinator.

**Submission:** Online - Individual

### Assessment Due Date

Week 12 Friday (2 June 2023) 11:00 pm AEST  
All submissions are due by the deadline.

### Return Date to Students

Exam Week Friday (16 June 2023)  
Within 2 weeks of the due date or within 2 weeks of submission (whichever is the later)

### Weighting

40%

**Assessment Criteria**

The assignment is individually assessed. The assessment criteria include aspects such as the quality of your answers to the Case Study questions, report formatting, and referencing mechanics. A detailed marking template will be available along with the assignment details on the unit website.

**Referencing Style**

- [Harvard \(author-date\)](#)

**Submission**

Online

**Submission Instructions**

Submit by clicking appropriate assessment submission link on Moodle unit website.

**Learning Outcomes Assessed**

- Apply Agile project scoping, scheduling, and velocity management tools and procedures
- Apply predictive project planning, scheduling, and resource management tools and procedures
- Evaluate project status and recommend appropriate corrective action where necessary

**Graduate Attributes**

- Problem Solving
- Critical Thinking

## 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