COIT12208 *ICT Project Management*
Term 2 - 2022

Profile information current as at 14/12/2025 03:41 pm

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 2 - 2022

- 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

— 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
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
Resources are available through the CQUni Moodle and/or Library website.

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

Schedule

1 Introduction - 11 Jul 2022

Module/Topic	Chapter	Events and Submissions/Topic
ICT project management concepts	The weekly readings are available via the unit website: • Part 1 Introduction and Overview (Haugan 2010). Haugan, GT 2010. *Project management fundamentals: key concepts and methodology*, 2nd edn, Oakland, Berrett-Hoehler. • Pp. 26-42 of 2 Scrum and eXtreme programming (Hunt 2018). Hunt, A 2018. *PMI-ACP project management institute agile certified practitioner exam study guide*. • Pp. 115-128 of 4 Agile Initiation and Stakeholder Engagement (Hunt 2018)	

2 Agile - 18 Jul 2022

Module/Topic	Chapter	Events and Submissions/Topic

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 - 25 Jul 2022

Module/Topic	Chapter	Events and Submissions/Topic
Prioritisation of ICT risks and assessment of risk responses	• 4 Teams (Lientz & Larssen 2006). Lientz, BP & Larssen, L 2006. *Risk management for IT projects: how to deal with over 150 issues and risks*, Routledge.	

4 Quality - 01 Aug 2022

Module/Topic	Chapter	Events and Submissions/Topic
Assessment using ICT metrics, Pareto charts and Fault Tree Analysis	• 8 Project Quality Management (PMI 2013). PMI 2013, *Software extension to the PMBOK guide*. 5th edn, Project Management Institute.	

5 Predictive Scope & Schedule - 08 Aug 2022

Module/Topic	Chapter	Events and Submissions/Topic
Modelling of ICT scenarios in MS Project	• 5 Developing the Schedule (Gido 2018). Gido, J 2018. *Successful project management*. 7th ed., Cengage.	**ADAPTIVE PM PRESENTATION** Due: Week 5 Thursday (11 Aug 2022) 11:00 pm AEST

Non-teaching Week - 15 Aug 2022

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

6 Predictive Resourcing, COCOMO, PERT & Monte Carlo - 22 Aug 2022

Module/Topic	Chapter	Events and Submissions/Topic
Improving the estimation of ICT task durations	• 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.	**Quiz 1** • Due Week: Week 6 • Due Day: Sunday • Due Time: 11.00 PM • Date: 28/08/2022 11.00 PM

7 Predictive Costs including Earned Value Management - 29 Aug 2022

Module/Topic	Chapter	Events and Submissions/Topic
Evaluation of a project's schedule and costs	• 7 Determining Costs, Budget and Earned Value (Gido 2018)	

8 Costs & timelines of Agile projects; Lean & Kanban - 05 Sep 2022

Module/Topic	Chapter	Events and Submissions/Topic
Costs & timelines of Agile projects; Lean & Kanban	• 3 Key Aspects of Additional Agile Methodologies (Hunt 2018)	

9 Stakeholders & Organisational Structures - 12 Sep 2022

Module/Topic	Chapter	Events and Submissions/Topic
Designing development organisational structures based on ICT systems architectures	• 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.	**Quiz 2** • Due Week: Week 9 • Due Day: Sunday • Due Time: 11.00 PM • Date: 18/09/2022 11.00 PM

10 Managing Risk - 19 Sep 2022

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 - 26 Sep 2022

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

12 Industry Guest Speaker Session - 03 Oct 2022

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. **Case Study** Due: Week 12 Thursday (6 Oct 2022) 11:00 pm AEST

Review/Exam Week - 10 Oct 2022

Module/Topic	Chapter	Events and Submissions/Topic

Exam Week - 17 Oct 2022

Module/Topic	Chapter	Events and Submissions/Topic

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 are to record and submit your presentation along with 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 of project management files or copying, for example, user stories, subtasks, issues, or controls, between individuals will be considered plagiarism. If you are in doubt about 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 Thursday (11 Aug 2022) 11:00 pm AEST

All submissions are due by the deadline.

Return Date to Students

Week 7 Thursday (1 Sept 2022)

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 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 Thursday (6 Oct 2022) 11:00 pm AEST

All submissions are due by the deadline.

Return Date to Students
Exam Week Thursday (20 Oct 2022)

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