



COIT13230 Application Development Project

Term 1 - 2021

Profile information current as at 11/12/2023 04:42 pm

All details in this unit profile for COIT13230 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 a capstone for the application development specialisation of the Bachelor of Information Technology (BIT) course. You are required to apply, synthesise and demonstrate the skills that you have developed in earlier core and application development specialisation units through the conduct of a group project addressing a significant authentic learning task. The scope of the project will include requirements gathering, design and implementation. The project will have a designated customer and your group will identify and employ a software development methodology appropriate for the project. You are encouraged to include the project management, quality assurance and software engineering artefacts produced in the project as part of a project portfolio.

Details

Career Level: *Undergraduate*

Unit Level: *Level 3*

Credit Points: *12*

Student Contribution Band: *8*

Fraction of Full-Time Student Load: *0.25*

Pre-requisites or Co-requisites

Pre-requisite: COIT12200, (COIT12207 or COIT13224) and (COIT12208 or COIS13064) Co-requisite: COIT13229 and COIT13234

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 - 2021

- 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 12-credit Undergraduate 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. **Project (applied)**

Weighting: 100%

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 evaluation

Feedback

Assignment marking criteria should reflect each team member's contribution.

Recommendation

Suggest to review and update the marking criteria for the last assignment to increase the mark allocation of individual contributions.

Feedback from Student evaluation

Feedback

More learning resources are expected.

Recommendation

Provide more reading materials or project examples to support learning.

Unit Learning Outcomes

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

1. Analyse software requirements and create well designed and documented software implementations.
2. Work effectively as part of a development team.
3. Develop and implement a quality management plan for a small software development project.
4. Identify and produce the project management artefacts required for a small software development project
5. Manage a small software development project
6. Demonstrate work readiness in terms of technical skills, communication skills and both professional and ethical behaviour.

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:

- Programming/software development (PROG)
- Project management (PRMG)
- Quality assurance (QUAS)
- Quality standards (QUST)
- User experience analysis (UNAN)
- User experience design (HCEV)
- User experience evaluation (HSEV)
- System design (DESN)
- Database design (DBDS)
- Testing (TEST)
- Configuration management (SYSP)

Textbooks and Resources

Textbooks

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 style: [Harvard \(author-date\)](#)
For further information, see the Assessment Tasks.

Teaching Contacts

Lily Li Unit Coordinator
l.li@cqu.edu.au

Schedule

Week 1 - 08 Mar 2021

Module/Topic	Chapter	Events and Submissions/Topic
Workshop: <ul style="list-style-type: none">• Unit outcomes• Review software engineering topics• Review project plan topics• Scrum - Agile software project management method (optional)		<ul style="list-style-type: none">• Form groups• Identify project• Identify roles in the team• Choose project management method

Week 2 - 15 Mar 2021

Module/Topic	Chapter	Events and Submissions/Topic
Workshop: <ul style="list-style-type: none">• Project planning		

Week 3 - 22 Mar 2021

Module/Topic	Chapter	Events and Submissions/Topic
Workshop		

Week 4 - 29 Mar 2021

Module/Topic	Chapter	Events and Submissions/Topic
Workshop		Submit Artefact one

Week 5 - 05 Apr 2021

Module/Topic	Chapter	Events and Submissions/Topic
Workshop		

Vacation Week - 12 Apr 2021

Module/Topic	Chapter	Events and Submissions/Topic
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Week 6 - 19 Apr 2021		
Module/Topic	Chapter	Events and Submissions/Topic
Workshop		Submit Artefact two
Week 7 - 26 Apr 2021		
Module/Topic	Chapter	Events and Submissions/Topic
Workshop		
Week 8 - 03 May 2021		
Module/Topic	Chapter	Events and Submissions/Topic
Workshop		Submit Artefact three - progress report A
Week 9 - 10 May 2021		
Module/Topic	Chapter	Events and Submissions/Topic
Workshop		
Week 10 - 17 May 2021		
Module/Topic	Chapter	Events and Submissions/Topic
Workshop		Submit Artefact three - progress report B
Week 11 - 24 May 2021		
Module/Topic	Chapter	Events and Submissions/Topic
Workshop		
Week 12 - 31 May 2021		
Module/Topic	Chapter	Events and Submissions/Topic
Workshop		Oral presentation
Review/Exam Week - 07 Jun 2021		
Module/Topic	Chapter	Events and Submissions/Topic
		Submit Artefact four - final project document and presentation PPT
Exam Week - 14 Jun 2021		
Module/Topic	Chapter	Events and Submissions/Topic

Term Specific Information

Unit Coordinator: Dr Lily Li
 College of ICT, School of Engineering and Technology
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Assessment Tasks

1 Project Portfolio - Software Development Artefacts

Assessment Type

Project (applied)

Task Description

You will work in teams using either a plan-driven or an Agile approach on the realisation of a small software development project. The following artefacts are to be submitted:

1. Artefact one (each team leader submits)

Plan-driven approach: Project Plan and Requirements Specification. The project plan is to provide a description of the project scope and its schedule, risks, product quality and resources. The requirements specification is to provide a clear list of non-functional and functional requirements for the software application to be developed.

Agile approach: Plan and User Stories. The plan is to provide a record of discussions with the customer regarding the nature of the application that is to be developed, the number of iterations expected and the anticipated involvement of the customer. User Stories document the initial set of user stories agreed with the customer.

2. Artefact two (each team leader submits)

Plan-driven approach: Design Document. The design document will follow the template provided in your pre-requisite unit, COIT12200 Software Design and Development.

Agile approach: Design review. A document outlining the software architecture and the initial design approach is to be provided.

3. Artefact three - Progress Reports (two submissions, each team leader submits)

Two progress reports are to be submitted as Word documents in Week 8 and Week 10. The reports are to review progress and to review the risk plan. If Agile development is being employed, the reports are to include a review of any design refactoring that has been made. This review will be assessed as part of artefact 2.

4. Artefact four - Final Project Document and Presentation (each student has to submit this final assignment)

Plan-driven approach - This final submission includes three distinctive parts: The first part is a project report describing the implementation and the testing of the product (group). The second part is a project review report including peer review report (individual). The last part consists of a PowerPoint file (group) and an Oral in-class/online presentation (all group members need to present at the presentation. Each student will be marked individually).

Agile approach - The final submission includes all the documents for the final release of the software product. It consists of the final requirements and design documents (group), the testing report (group), the project review report including peer review report (individual), the PowerPoint file (group) and the Oral in-class/online presentation (all group members need to present at the presentation. Each student will be marked individually).

Feedback for artefacts one & two will be provided within two weeks after the submission. Feedback for artefact three will be provided within one week after the submission. Feedback for artefact four will be available on the Certification day. If the Agile approach is employed, your marks for each artefact will be assessed at the final stage. Please make sure to re-submit all your previous artefacts in the final submission.

Contact time is allocated each week in the form of a workshop. Regular project meetings will be held within the workshop to present, review and monitor the progress of the teams. Teams will be required to give presentations for artefacts two and four in the week that the artefact is due. The project itself will be concerned with the development of a 3-layered information system or an equivalent application; details will be available on the unit website.

Assessment Due Date

Refer to the unit schedule for due dates.

Return Date to Students

Feedback for artefacts one and two will be returned within 2 weeks of submission. Feedback for artefact three will be returned within 1 week of submission. Feedback for artefact four will be returned on Certification day.

Weighting

100%

Assessment Criteria

1. Artefact one (30%)
2. Artefact two (20%)
3. Artefact three (10%)

4. Artefact four (40%)

Note: The detailed marking guides are available on the unit website. For the Agile approach, the marks for Artefact one, Artefact two and Artefact three will be awarded at the end of term, together with Artefact four. The feedback will be provided for those early Artefacts.

Referencing Style

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

Submission

Online

Submission Instructions

Artefacts 1, 2 & 3 will be submitted by the team leaders. One group one submission is required. Every student needs to submit the Artefact 4.

Learning Outcomes Assessed

- Analyse software requirements and create well designed and documented software implementations.
- Work effectively as part of a development team.
- Develop and implement a quality management plan for a small software development project.
- Identify and produce the project management artefacts required for a small software development project
- Manage a small software development project
- Demonstrate work readiness in terms of technical skills, communication skills and both professional and ethical behaviour.

Graduate Attributes

- Communication
- Problem Solving
- Critical Thinking
- Information Literacy
- Team Work
- Information Technology Competence
- Cross Cultural Competence
- Ethical practice
- Social Innovation

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