

Unit Outline

COS40005

Computing Technology Project A

Semester Jan 2025

Please read this Unit Outline carefully. It includes:

PART A Unit summary

PART B Your Unit in more detail

PART C Further information



"Swinburne University of Technology recognises the historical and cultural significance of Australia's Indigenous history and the role it plays in contemporary education"

Each day in Australia, we all walk on traditional Indigenous land

We therefore acknowledge the traditional custodians of the land that our Australian campuses currently occupy, the Wurundjeri people, and pay respect to Elders past and present, including those from other areas who now reside on Wurundjeri land"

PART A: Unit Summary

Unit Code(s)		COS40005
Unit Title		Computing Technology Project A
Duration		One semester
Total Contact Hours		48 hours
Requisites:		
	Pre-requisites	175 Credit Points
	Co-requisites	
	Concurrent pre-requisites	
	Anti-requisites	
	Assumed knowledge	Advanced Computer Programming (eg, COS20007), AND IT Project Management (eg, COS20031)
Credit Points		12.5 credit points
Campus/Location		Da Nang
Mode of Delivery		Blended
Assessment Summary		<p>This Unit of Study forms the first half of the two- semester Capstone project. Projects will continue into the next semester (under COS40006) under the same team and supervisory arrangements established in this semester. Students will be assessed on the basis of a portfolio, consisting of participation, contribution, documentation, development, process, product, and presentation.</p> <p>To pass this unit, a student must: (i) achieve an aggregate mark for the unit of 50% or more, and (ii) complete the project to an acceptable standard. A rubric will be used to determine if students have met the acceptable standard, and will be available on Canvas. Students who do not successfully achieve the hurdle requirement (ii), will receive a maximum of 45% as the total mark for the unit.</p>

Aims

This is a project-based unit in which students work individually, or in teams if the project is a large industry project, to provide students with the skills to generate a computing technology solution to solve one or more industry challenges specifically designed and oriented towards computing technologies. Having an overall focus on computing technology innovation, students will be focusing on the research and development stages of a year-long project, this being the first part. Students will be able to select a project from a range of industry-oriented projects aligned to their chosen computing major. Teams of students will have a staff member as a

'facilitator' to guide their learning whilst working on their projects.

Unit Learning Outcomes

Students who successfully complete this unit can:

1. Review literature and investigate topic areas relating to computing technology
2. Justify and manage risks in the project planning and execution phases of computing technology projects
3. Apply research methods and skills to complete a research report
4. Investigate the importance of research and data ethics
5. Synthesise work related to the computing technology projects relevant to students major
6. Communicate within teams and stakeholders using appropriate verbal, written and technological approaches

Graduate Attributes

The Swinburne Graduate Attributes describe the capability of our graduates to use knowledge, skills and behaviours to contribute to society meaningfully and positively. They include professional, self-directed learning and future-ready skills.

This unit contributes to the development of the following Swinburne Graduate Attributes:

- GA1 Communication - Verbal communication:
- GA2 Communication - Communicating using different media:
- GA3 Teamwork - Collaboration and negotiation:
- GA4 Teamwork – Teamwork roles and processes:

Other graduate attributes may be practised in the unit but are not formally taught as part of the unit content, nor incorporated within formal assessment.

Content

- Literature Review in computing technologies related to students major
- Risk Analysis and Management in computing technology projects
- Research Methods in computing technology
- Research Ethics in computing technology
- Technical skills relevant to students major

PART B: Your Unit in more detail

Unit Improvements

Feedback provided by previous students through the Student Survey has resulted in improvements that have been made to this unit. Recent improvements include:

- The unit is developed from scratch, however, feedback from other similar units such as individual research report has been incorporated in this unit.

Unit Teaching Staff

Name	Role	Email	Consultation Times
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Dr. Ly Quynh Tran	Unit Convenor	gly@swin.edu.au	By email appointment
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Learning and Teaching Structure

Category	Activity	Total Hours	Hours per Week	Teaching Period Weeks
In person	Seminars, Lectures, Reviews and Presentations	24 hours	2 hours	Weeks 1 to 12
In person/ Online	Supervisor Meetings	12 hours	1 hour	Weeks 1 to 12
In person/ Online	Team Meetings	12 hours	1 hour	Weeks 1 to 12
Unspecified Activities	Independent Learning/ Project Work	102 hours	8.5 hour	Weeks 1 to 12

The “Project Work” and “Team Meeting” activities may require more time during some weeks of the semester and less in others. Students are advised to plan the work in this Unit of Study in the context of their other time commitments.

Week by Week Schedule

The following schedule is provisional and some of the lecture topics may change subject to availability of guest lecturers and the needs of the unit.

Week	Week Beginning	Teaching and Learning Activity	Student Task or Assessment
1	30 Dec	Topic: Teamwork and Leadership	Individual: Worklog
2	06 Jan	Topic: Project Initiation	Individual: Worklog Group: Team Plan
3	13 Jan	Topic: agile development	Individual: Worklog
4	20 Jan	Topic: Requirement Engineering	Individual: Worklog
Lunar New Year's Holiday (27 Jan - 09 Feb 2025, inclusively)			
5	10 Feb	Topic: User - Center Design 1	Individual: Peer Review Group: Project specification
6	17 Feb	Topic: User - Center Design 2	Individual: Worklog
7	24 Feb	Topic: Literature Review	Individual: Worklog

8	03 Mar	Topic: Project Management	Individual: Worklog, Peer review Group: Design Plan
9	10 Mar	Topic: Risk Management	
10	17 Mar	Topic: Quality Assurance	Individual: Worklog, Research Report
11	24 Mar	Topic: Communication	Individual: Worklog, Peer review, Group: Design Implementation Report
12	31 Mar	Topic: Career development	Individual: Worklog Group: Poster
13			Group: Video presentation

Assessment

a) Assessment Overview

Tasks and Details	Individual or Group	Weighting	Mapped Unit Learning Outcomes	Mapped Graduate Attributes	Assessment Due Date
1. Worklog	Individual	6%	All	1	Weekly from week 1-12
2. Research Report	Individual	14%	1-5	1	End of week 10
3. Portfolio	Group	70%	All	All	End of week 12
4. Poster	Group	5%	All	All	End of week 12
5. Video Presentation	Group	5%	All	All	End of week 13

b) Minimum requirements to pass this unit

To pass this unit, you must:

- i. achieve an overall mark for the unit of 50% or more, and
- ii. complete the project to an acceptable standard. A rubric will be used to determine if students have met the acceptable standard. The rubric is available on Canvas.

If you do not complete all the worklogs and do not submit a research report and all the group tasks, you will receive 0% (N) as your total mark for the unit.

Students who do not successfully achieve hurdle requirement (ii), will receive a maximum of 45% as the total mark for the unit.

c) Final Assessment Period

There is no final examination for this unit. However, the group final presentations will be scheduled during the examination period.

d) Submission Requirements

The research report and portfolio will be submitted online through the Canvas assessment submission system which integrates with the Turnitin plagiarism checking service.

Please ensure you keep a copy of all assessments that are submitted.

All submissions should contain a cover page with student name and ID and a statement for the acknowledge of the country.

e) Extensions and Late Submission

Unless an extension has been approved, late submissions will result in a penalty. You will be penalised 10% of your achieved mark for each working day the task is late, up to a maximum of 5 working days. After 5 working days, a zero result will be recorded.

f) Referencing

To avoid breaching academic integrity, you are required to provide references whenever you include information from other sources in your work and acknowledge when you have used Artificial Intelligence (AI) tools (such as ChatGPT). Further details regarding academic integrity are available in Section C of this document.

Referencing conventions required for this unit are: IEEE citation style (<https://pitt.libguides.com/citationhelp/ieee>)

Helpful information on referencing can be found at <http://www.swinburne.edu.au/library/referencing/>

g) Groupwork Guidelines

A group assignment is the collective responsibility of the entire group, and if one member is temporarily unable to contribute, the group should be able to reallocate responsibilities to keep to schedule. In the event of longer-term illness or other serious problems involving a member of the group, it is the responsibility of the other members to notify immediately the Unit Convenor or relevant tutor.

Group submissions must be submitted with an Assignment Cover Sheet, with a statement of contribution by all members of the group.

All group members must be satisfied that the work has been correctly submitted. Any penalties for late submission will generally apply to all group members, not just the person who submitted.

Required Textbook(s)

No required textbook

Recommended Reading Materials

The Library has a large collection of resource materials. Listed below are some references that will provide valuable supplementary information to this unit. It is also recommended that you explore other sources to broaden your understanding.

SCHWABER, K. & BEEDLE, M. 2002. Agile software development with Scrum, Upper Saddle River, NJ, Prentice Hall.

PART C: FURTHER INFORMATION



For further information on any of these topics, refer to Swinburne's Student webpage <http://www.swinburne.edu.au/student/>

Student behaviour and wellbeing

All students are expected to: act with integrity, honesty and fairness; be inclusive, ethical and respectful of others; and appropriately use University resources, information, equipment and facilities. All students are expected to contribute to creating a work and study environment that is safe and free from bullying, violence, discrimination, sexual harassment, vilification and other forms of unacceptable behaviour.

The [Student Charter](#) describes what students can reasonably expect from Swinburne in order to enjoy a quality learning experience. The Charter also sets out what is expected of students with regards to your studies and the way you conduct yourself towards other people and property.

You are expected to familiarise yourself with University regulations and policies and are obliged to abide by these, including the [Student Academic Misconduct Regulations](#), [Student General Misconduct Regulations](#) and the [People, Culture and Integrity Policy](#). Any student found to be in breach of these may be subject to disciplinary processes.

Examples of expected behaviours are:

- conducting yourself in teaching areas in a manner that is professional and not disruptive to others
- following specific safety procedures in Swinburne laboratories, such as wearing appropriate footwear and safety equipment, not acting in a manner which is dangerous or disruptive (e.g. playing computer games), and not bringing in food or drink
- following emergency and evacuation procedures and following instructions given by staff/wardens in an emergency response

Canvas

You should regularly log on to the Swinburne learning management system, Canvas. You can access Canvas via the [Student login](#) webpage or <https://swinburne.instructure.com/>. Canvas is updated regularly with important unit information and communications.

Communication

All communication will be via your Swinburne email address. If you access your email through a provider other than Swinburne, then it is your responsibility to ensure that your Swinburne email is redirected to your private email address.

Academic Integrity

Academic integrity is about taking responsibility for your learning and submitting work that is honestly your own. It means acknowledging the ideas, contributions and work of others; referencing your sources and acknowledging the use of artificial intelligence tools (such as ChatGPT, DALL·E, Midjourney); contributing fairly to group work; and completing tasks, tests and exams without cheating. Artificial intelligence tools should only be used where approved by the Unit Convenor.

Swinburne University uses the Turnitin system, which helps to identify inadequate citations, poor paraphrasing and unoriginal work in assignments that are submitted via Canvas. Your Unit Convenor will provide further details.

Plagiarising, cheating and seeking an unfair advantage in a test, exam or assessment task are all breaches of academic integrity and treated as academic misconduct. Examples of breaches of academic integrity include:

- using the whole or part of computer program written by another person as your own without appropriate acknowledgement
- copying the whole or part of somebody else's work in an assessment, including material from a published work, a website or database, a set of lecture notes, current or past student's work, or any other person's work

- using output from artificial intelligence tools (e.g. ChatGPT) in whole or part without acknowledgement and/or without the approval of the Unit Convenor
- poorly paraphrasing somebody else's work
- using a musical composition or audio, visual, graphic and photographic work created by another without acknowledgment
- using objects, artefacts, costumes or models created by another person and presenting them as your own
- submitting assessments that have been developed by another person or service (paid or unpaid), referred to as contract cheating
- presenting or submitting assignments or other work in conjunction with another person or group of people when that work should be your own independent work. ■ enabling others to cheat, including letting another student copy your work or by giving access to a draft or completed assignment.

The penalties for academic misconduct can be severe, ranging from a zero grade for an assessment task through to exclusion from Swinburne.

For further details, see <https://www.swinburne.edu.au/student-login/academic-integrity/>

Student support

Swinburne offers a range of services and resources to help you complete your studies successfully. Your Unit Convenor or studentHQ can provide information about the study support and other services available for Swinburne students. See <https://www.swinburne.edu.au/life-at-swinburne/student-support-services/> for further information.

Special consideration

If your studies have been adversely affected due to serious and unavoidable circumstances outside of your control (e.g. severe illness or unavoidable obligation), you may be able to apply for special consideration (SPC).

Applications for Special Consideration are submitted via the SPC online tool normally no later than 5.00pm on the third working day after the submission/sitting date for the relevant assessment component. See <https://www.swinburne.edu.au/life-at-swinburne/student-support-services/special-consideration-assistance/>

Accessibility needs

Sometimes students with a disability, a mental health or medical condition or significant carer responsibilities require reasonable adjustments to fully access and participate in education. Swinburne's AccessAbility Services can develop an 'Education Access Plan' that includes the services and reasonable adjustments that you need. The plan makes recommendations to University teaching and examination staff.

It is recommended that you register with AccessAbility Services within one week after the commencement of your unit to allow the University to make reasonable adjustments.

Review of marks

An independent marker reviews all fail grades for major assessment tasks. In addition, a review of assessment is undertaken if your final result is between 45 and 49 or within 2 marks of any grade threshold.

You can ask the Unit Convenor to check the result for an assessment item or your final result. Your request must be made in writing within 10 working days of receiving the result. The Unit Convenor can discuss the marking criteria with you and check the aggregate marks of assessment components to identify if an error has been made. This is known as local resolution.

If you are dissatisfied with the outcome of the local resolution, you can lodge a formal complaint.

Feedback, complaints and suggestions

In the first instance, discuss any issues with your Unit Convenor. If your concerns are not resolved or you would prefer not to deal with your Unit Convenor, then you can complete a feedback form.

See <https://www.swinburne.edu.au/corporate/feedback/>

Advocacy

Should you require assistance with any academic issues, University statutes, regulations, policies and procedures, you are advised to seek advice from an Academic Student Support Officer at Swinburne Student Life.

For an appointment, please send a query via Student Portal at portal.swin.edu.vn and contact the Academic Department. For more information, please see <https://swinburne-vn.edu.vn/>