

Unit Outline

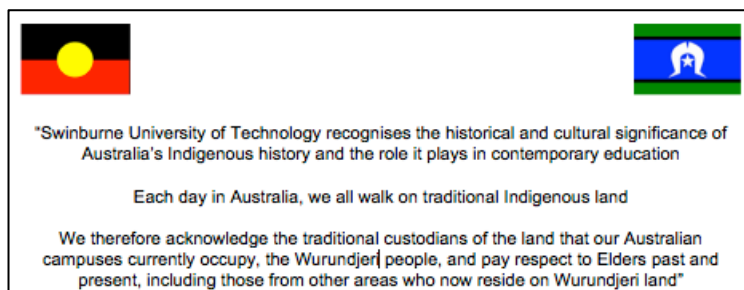
COS60010

Technology Inquiry Project

Semester 1 2024

Please read this Unit Outline carefully. It includes:

- PART A** Unit summary
- PART B** Your Unit in more detail
- PART C** Further information



PART A: Unit Summary

Unit Code(s)	COS60010
Unit Title	Technology Inquiry Project
Duration	One semester or equivalent
Total Contact Hours	36 hours
Requisites:	
Pre-requisites	Nil
Co-requisites	Nil
Concurrent pre-requisites	Nil
Anti-requisites	Nil
Assumed knowledge	Nil
Credit Points	12.5
Campus/Location	Hawthorn
Mode of Delivery	Blended
Assessment Summary	Research Report (Individual) 10% Application Concept (Group) 30% Project (Group) 30% Project Report (Individual) 30%

Aims

In this project-based unit students work in supervised teams to inquire and solve one or more challenges specifically designed and oriented towards technology. The project(s) must have a substantial emphasis on programming.

Unit Learning Outcomes

Students who successfully complete this unit can:

1. Assess the role of programming principles in a variety of settings
2. Reflect on practice via the application of self- and peer-evaluation
3. Apply knowledge of advanced programming fundamentals to technology challenges
4. Demonstrate the ability to work as an effective team member using simple project management tools
5. Find, organise, and evaluate information on a range of topics related to technology challenges
6. Consider and reflect upon social and cultural perspectives that impact on learning and working in a team

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:
- GA5 Digital literacies– Information literacy:
- GA6 Digital Literacies– Technical literacy:

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

- Designing, writing, compiling, documenting, and testing programs
- Programming language syntax
- Structured programming principles
- Functional decomposition
- Performing Research
- Team dynamics
- Technology Project Management

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:

- Added more formal seminars
- Added more reading and reference materials

Unit Teaching Staff

Name	Role	Room	Phone	Email	Consultation Times
Nicole Ronald	Unit Convenor			nronald@swin.edu.au	Info on Canvas
Alfandi Yahya	Tutor			alfandiyahya@swin.edu.au	
Cliff Warren	Tutor			cjwarren@swin.edu.au	
Eureka Priyadarshani	Tutor			wpriyadarshani@swin.edu.au	
James Bonner	Tutor			jbonner@swin.edu.au	
Naveed Ali	Tutor			nali1@swin.edu.au	
Sharon Stratsianis	Tutor			sastratsianis@swin.edu.au	
Tuan Dung Lai	Tutor			tuandunglai@swin.edu.au	

Learning and Teaching Structure

Category	Activity	Total Hours	Hours per Week	Teaching Period Weeks
Seminars	Lecture	12 hours	1 hour	Weeks 1 to 12
Workshops	Class	24 hours	2 hours	Weeks 1 to 12

Week by Week Schedule

Note that due to the nature of inquiry projects, this schedule may change; the weekly seminar in particular might be on different topics due to its timing in relation to the workshops. Please refer to Canvas for assignment due dates and class changes.

Week/module	Week Beginning	Teaching and Learning Activity	Student Task or Assessment
1	26 Feb	Introduction to the Unit	
2	4 Mar	Formation of student teams Introduction to the Project and	

		identification of project learning issues	
3	11 Mar	Research of project learning issues	
4	18 Mar	Research of project learning issues	Individual research report due.
5	25 Mar	Development and design	
Mid-semester break			
6	8 Apr	Development and design	Team inquiry concept due. Peer review 1 due
7	15 Apr	Modelling, and simulation or building	
8	22 Apr	Modelling, and simulation or building	
9	29 Apr	Testing and evaluation	
10	6 May	Testing and evaluation	
11	13 May	Product delivery	Team project demonstration due. Peer review 2 due.
12	20 May	Unit retrospective	Individual project report due.

Assessment

a) Assessment Overview

Tasks and Details	Individual or Group	Weighting	Mapped Unit Learning Outcomes	Mapped Graduate Attributes	Assessment Due Date
1. Individual Research Report	Individual	10%	1, 3		After module 4
2. Team Inquiry Concept	Group	30%	1, 4, 6		After module 6
3. Team Project Demonstration/Presentation	Group	30%	3, 4, 6		After module 11
4. Individual Project Report	Individual	30%	2, 5		After module 12

b) Minimum requirements to pass this unit

To pass this unit, you must:

- achieve an overall mark for the unit of 50% or more.

c) Final Assessment Period

If the unit you are enrolled in has a final assessment (including invigilated exams), you will be expected to be available for the entire final assessment period including any Special Exam period.

d) Submission Requirements

Assignments and other assessments are generally 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.

In cases where a hard copy submission is required an Assessment Cover Sheet must be submitted with your assignment. The standard Assessment Cover Sheet is available from the [Submitting work](#) webpage or www.swinburne.edu.au/studentforms/. **Submitting electronically signifies that the terms in the Assessment Cover Sheet have been accepted.**

Output of generative AI tools is **not** permitted to be submitted in assessment tasks. Each major submission (research, inquiry concept, presentation/documentation, and project report) must include a statement regarding who contributed to the work and how. Use therefore of generative AI tools would breach academic misconduct regulations and sanctions can be applied.

e) Extensions and Late Submission

Late Submissions - 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: APA7

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 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, signed 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)

The required textbook(s) are available through the Swinburne Library or can be purchased from bookshops.

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.

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

If you require assistance with any academic issues, University statutes, regulations, policies and procedures, you are advised to seek advice from an Independent Advocacy Officer at Swinburne Student Life. Talking to an Advocacy Officer is free, independent and confidential.

For more information and booking an appointment, please see <https://www.swinburne.edu.au/current-students/student-services-support/advocacy/>