Unit Outline



INF30020 Information Systems Risk and Security

Semester 2, 2022

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 Wurundjerl people, and pay respect to Elders past and present, including those from other areas who now reside on Wurundjerl land"

PART A: Unit Summary

Unit Code(s)		INF30020		
Unit Title		Information Systems Risk and Security		
Duration		One Semester or equivalent		
Total Contact Hours		36 hours		
Requisites:				
		100 Credit Points AND		
		INF10003 Introduction to Business Information Systems OR		
	Pre-requisites	INF10006 Information Systems and Fundamentals OR		
		SWE20004 Technical Software Development		
		OR		
		COS20007 Object-Oriented Programming		
	Co-requisites	Nil		
	Concurrent pre-requisites	Nil		
	Anti-requisites	Nil		
	Assumed knowledge	Nil		
Credit I	Points	12.5		
Campu	s/Location	Online and on-campus (Hawthorn)		
Mode of Delivery		Online and on-campus		
Assessment Summary		 Risk and security management report A , Individual, 25% Risk and security management report B, Group, 25% Continuous learning activities, 30% Online Quizzes (x2), 20% 		

Aims

This unit of study introduces students to information risk and security management in contemporary enterprise. The unit engages students with the knowledge and techniques applied by organisations to manage risks and provide for information security. This includes the implementation of appropriate information management plans, assurance processes, standards and frameworks. Students will learn about the legal, professional and ethical responsibilities of information risk and security management through real-world case-based scenarios and become familiar with approaches to information governance and assurance including the automated tools and approaches that are used by organisations

Unit Learning Outcomes

Students who successfully complete this Unit should be able to:

- 1 Describe the importance of information security and risks management in achieving organisational goals and objectives
- 2 Assess and apply information systems risk and security management standards and frameworks to real-word case-based scenarios
- 3 Analyse major theories, concepts and methodologies for managing risks and assuring the integrity and security of information assets
- 4 Evaluate appropriate governance, assurance and internal control techniques for managing information risks and security
- 5 Communicate effectively as a professional and function as an effective leader or member of a diverse team.

Key Generic Skills

- teamwork skills
- analysis skills
- problem solving skills
- communication skills
- ability to tackle unfamiliar problems
- ability to work independently

Content

- An introduction to Information Systems risk and security
- Risk management, assessment and mitigation
- Information security management, governance and assurance
- · The role of policies and standards in IS risk and security management
- Contingency planning, including incident management, business continuity and disaster recovery planning
- Fraud and forensic auditing: Fraud, cybercrime, forensic auditing and continuous monitoring
- Compliance frameworks and legal, professional and ethical issues in IS security and risk management
- Major Theories, concepts and methodologies for managing information systems and assuring the integrity and security of information assets
- The socio-technological dimensions (human and organisational factors) in IS security and risk management

PART B: Your Unit in more detail

Unit Improvements

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:

- Improved weighting for assignments,
- Reduction in total number of assessments,
- Extended focus on information security policy.

Unit Teaching Staff

Name	Role	Room	Phone	Email	Consultation
Dr. Paul Scifleet	Convener & Lecturer	EN1217	9214 5586	pscifleet@swin.edu.au	TBC

Learning and Teaching Structure

Activity	Total Hours	Scheduled Hours	Comments
Recorded online class (asynchronous)	12	1 hr / week	These 2 activities make up the 36 hrs
Scheduled on-campus classes (F2F)	24	2 hrs / week	of 'class time'
Online activities and independent Learning	114	9.5 hrs / week	Expected additional student self-direct out-of-class hours
TOTAL HOURS	150	12.5 hrs / week	

This includes attending, participating, and engaging in required class activities:

- Asynchronous online learning sessions, self-directed at your own time,
- On-campus learning events (i.e., workshops & tutorial activities), at your scheduled time,
- Non-scheduled learning events and activities (including directed learning activities and assessments, independent study and research, student group meetings).

To be successful, students should:

- Read all prescribed materials in preparation for each class
- Attend and engage in all scheduled classes and/or events (i.e., Recorded asynchronous materials, workshops, discussion forums, other)
- Start assessment tasks well ahead of the due date, and submit assessments promptly
- Read / listen to all feedback carefully, and consider it for future assessment
- Engage with fellow students and teaching staff in a respectful and professional manner

Week by Week Schedule

All assessment tasks are submitted in Canvas; TBA – to be announced

Week	Week Beginning	Weekly Teaching and Learning	Assessment and Learning activities			
1	01 August	Introduction and Overview: IS risk and security	Class activity & reading (TBA)			
2	08 August	Information Security & risks I	Class activity & reading (TBA); Submit CLA #1, Friday 05 August			
3	15 August	Information Security & risks II	Class activity & reading (TBA)			
4	22 August	Assessing security and establishing Internal Control	Class activity & reading (TBA); Submit CLA #2, Friday 26 August			
5	29 August	Mitigation, treatment & control I	Class activity & reading (TBA)			
6	05 September	Mitigation, treatment & control II	Class activity & reading (TBA); Submit Online Quiz #1, Friday 09 September			
Mid Semester Break – 12 September to 18 September.						
		ISRS Report Part A, due Friday 16	September.			
7	19 September	Information Security & Information Governance	Group Warm-up (TBA); Submit in class, Wednesday 21 September			
8	26 September	Business Continuity Management	Class activity & reading (TBA);			
9	03 October	Contingency Planning	Class activity & reading (TBA); Submit CLA #3, Friday 07 October			
10	10 October	Cybersecurity and Business Continuity Management	Class activity & reading (TBA);			
11	17 October	Fraud and forensic auditing: Fraud, cybercrime, forensic auditing and continuous monitoring	Class activity & reading (TBA); Submit Report Part B, Friday 21 October			
12	24 October	Information Security ethics & compliance and pre-quiz revision	Class activity & reading (TBA); Submit Online Quiz #2, Friday 28 October			

Assessment

a) Assessment Overview

Tasks and Details		Individual or Group	Weighting	Assesses unit learning outcomes	Assessment Due Date
1.	Risk and security management report (part A)	Individual	25%	1, 2, 3, 5	11:59pm, Friday, 16 September
2.	Risk and security management report (part B)	Group	25%	2, 3, 4, 5	11:59pm, Friday, 21October
3.	Continuous learning activities	Individual	30%	3, 4, 5	Continuously (there are 3x CLAs)
4.	Online Quizzes (x2)	Individual	20%	1, 3, 4	By Friday 09 September , 9pm AND Friday 28 October, 9pm

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) Examinations

There is no formal/official final exam for this unit.

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.

e) Extensions and Late Submission

Unless an extension has been approved, late submissions will result in a penalty.

For, *Risk and Security Management Report Part A & B*, 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. *Continuous Learning Activities* will be penalised at 1 marks per day late and will not be accepted after the weekly (Wednesday) class. *Online Quizzes* are undertaken under test conditions and they must be submitted on time or a request for special consideration must be made.

f) Referencing

To avoid plagiarism, you are required to provide a reference whenever you include information from other sources in your work. Further details regarding plagiarism are available in Section C of this document.

Referencing conventions required for this unit are: Harvard Referencing Style

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.

Reference Materials

Students are advised to check the unit outline in the relevant teaching period for appropriate textbooks and further reading

Required Textbook(s)

An E-book of the required textbook is available from Library and it not essential to purchase a book for this unit. INF30020 works closely with the following two books

Whitman, Michael E. annd Mattord, Herbert J. *Management of information security*. Sixth Edition., Stamford, Conn. : Cengage Learning, 2019. (*Recommended*)

Gibson, Darril, *Managing Risk in Information Systems*. Jones & Bartlett Learning, Burlington, MA, U.S.A., 2015.

A list of <u>required</u> weekly readings will also be provided in Canvas. Readings will be available through the library and/or as publicly accessible online resource.

Additional Reading Materials

The Library has a large collection of resource materials, both texts and current journals. 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.

- Alberts, C & Dorofee, A, Managing Information Security Risks. Boston, Addison Wesley, 2003
- Calder, A. & Watkins, S., IT Governance: A Manager's Guide to Data Security and ISO27001/ISO27002. Kogan Page, 2008.
- Easttom, C, Computer Security Fundamentals (2nd Ed.). Indiana, Pearson 2012.
- Peltier, TR, Information Security Risk Analysis, 2nd edn, Auerbach Publications, 2005.
- Raval, Vasant & Fichadia, Ashok, Risks, Controls and Security, John Wiley & Sons, Inc. 2007
- Slay, Jill & Koronios, A.., Information Technology: Security & Risk Management, John Wiley & Sons, Inc 2006
- Tipton, H.F. and Krause, M., *Information Security Management Handbook (6th Ed.)*, CRC Press, 2007.

PART C: FURTHER INFORMATION



For further information on any of these topics, refer to Swinburne's Current Students web page 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 <u>Student Charter</u> 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 <u>Student Academic Misconduct Regulations</u>, <u>Student General Misconduct Regulations</u> and the <u>People, Culture and Integrity Policy</u>. 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 access the Swinburne learning management system, Canvas, which is available via the Current Students 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; contributing fairly to group work; and completing tasks, tests and exams without cheating.

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 with regards to an exam or assessment are all breaches of academic integrity and treated as academic misconduct.

Plagiarism is submitting or presenting someone else's work as though it is your own without full and appropriate acknowledgement of their ideas and work. Examples include:

- using the whole or part of computer program written by another person as your own
- using the whole or part of somebody else's written work in an essay or other assessable work, including material from a book, journal, newspaper article, a website or database, a set of lecture notes, current or past student's work, or any other person's work
- poorly paraphrasing somebody else's work
- using a musical composition or audio, visual, graphic and photographic work created by another
- using realia created by another person, such as objects, artefacts, costumes, models
- submitting assessments that have been developed by another person or service (paid or unpaid), often 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. This is regardless of
 whether or not it is with the knowledge or consent of the other person(s). Swinburne
 encourages students to talk to staff, fellow students and other people who may be able to
 contribute to a student's academic work but where an independent assignment is required,
 the work must be the student's own
- enabling others to plagiarise or 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 expulsion from the unit and, in the extreme, exclusion from Swinburne.

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.

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 will be submitted via the SPC online tool normally <u>no later than 5.00pm</u> on the third working day after the submission/sitting date for the relevant assessment component.

Accessibility needs

Sometimes students with a disability, a mental health or medical condition or significant carer responsibilities require reasonable adjustments to enable full access to and participation in education. Your needs can be addressed by Swinburne's AccessAbility Services by negotiating and distributing an 'Education Access Plan'. The plan makes recommendations to University teaching and examination staff. You must notify AccessAbility Services of your disability or condition 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.

If you are not satisfied with the result of an assessment, you can ask the Unit Convenor to review the result. Your request must be made in writing within 10 working days of receiving the result. The Unit Convenor will review your result to determine if your result is appropriate.

If you are dissatisfied with the outcomes of the review, you can lodge a formal complaint.

Feedback, complaints and suggestions

In the first instance, discuss any issues with your Unit Convenor. If you are dissatisfied with the outcome of the discussion or 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 Independent Advocacy Officer at Swinburne Student Life.

For an appointment, please call 03 9214 5445 or email advocacy@swin.edu.au For more information, please see https://www.swinburne.edu.au/current-students/student-services-support/advocacy/