

COMP6013

Introduction to Cyber Security

Session 1, In person-scheduled-weekday, North Ryde 2025

School of Computing

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General Information

Unit convenor and teaching staff

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TBA refer to ilearn

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Credit points

10

Prerequisites

Corequisites

Co-badged status

Unit description

This unit tackles cyber security as a multidisciplinary issue. It introduces information security and important technology concepts as well as cyber hygiene principles to remain safe in the digital world. It discusses cyber criminality (perpetrators and activities on the dark web), its impact on society, and prompts for us to critically think about the relationship between cyber security and privacy, from a legal standpoint. Finally, this unit provides insights into the cybersecurity risks faced by businesses and the role that risk management plays in addressing those risks in the context of corporate governance.

Important Academic Dates

Information about important academic dates including deadlines for withdrawing from units are available at https://www.mq.edu.au/study/calendar-of-dates

Learning Outcomes

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

ULO1: Demonstrate an understanding of technical concepts related to information security, computing, networking, and emerging technologies.

ULO2: Apply cyber hygiene principles to achieve personal security in the digital world

ULO3: Report on cyber criminality (in terms of activities, perpetrators and their motives) as well as its impact on society.

ULO4: Critically evaluate the relation between cyber security and privacy in the context of a legal and regulatory framework.

ULO5: Identify cybersecurity risks faced by businesses and relate the management of those risks to enterprise governance.

General Assessment Information

Assessment Task Release Dates:

Assignment: To be released no later than 16th March.

Final Take Home Essay: Specifications to be released no later than 26th May.

Late Assessment Submission Penalty

Unless a Special Consideration request has been submitted and approved, a 5% penalty (of the total possible mark of the task) will be applied for each day a written report or presentation assessment is not submitted, up until the 7th day (including weekends). After the 7th day, a grade of '0' will be awarded even if the assessment is submitted. The submission time for all uploaded assessments is 11:55 pm. A 1-hour grace period will be provided to students who experience a technical concern. For any late submission of time-sensitive tasks, such as scheduled tests/exams, performance assessments/presentations, and/or scheduled practical assessments/labs, students need to submit an application for Special Consideration.

Special Consideration

The <u>Special Consideration Policy</u> aims to support students who have been impacted by short-term circumstances or events that are serious, unavoidable and significantly disruptive, and which may affect their performance in assessment. If you experience circumstances or events that affect your ability to complete the assessments in this unit on time, please inform the convenor and submit a Special Consideration request through <u>connect.mq.edu.au</u>.

Assessments where Late Submissions will be accepted

In this unit, late submissions will be accepted as follows:

In class assessments, YES, Standard Late Penalty applies

Report, YES, Standard Late Penalty applies

Final Take Home Essay, YES, Standard Late Penalty applies

Requirements to Pass this Unit

To be eligible to pass this unit, it is necessary to obtain a mark of at least 50% in the unit overall.

Assessment Tasks

Name	Weighting	Hurdle	Due
Quiz	30%	No	Week7, during the SGTA class in which you are registered.
Assignment	30%	No	Due: Sunday 18th May 23:55
Final Take Home Essay	40%	No	Due: Sunday 8th June 23:55

Quiz

Assessment Type 1: Quiz/Test Indicative Time on Task 2: 10 hours

Due: Week7, during the SGTA class in which you are registered.

Weighting: 30%

This assessment task will test students' knowledge around the concepts covered in the lectures.

On successful completion you will be able to:

- Demonstrate an understanding of technical concepts related to information security, computing, networking, and emerging technologies.
- · Apply cyber hygiene principles to achieve personal security in the digital world
- Report on cyber criminality (in terms of activities, perpetrators and their motives) as well
 as its impact on society.
- Critically evaluate the relation between cyber security and privacy in the context of a legal and regulatory framework.
- Identify cybersecurity risks faced by businesses and relate the management of those risks to enterprise governance.

Assignment

Assessment Type 1: Project

Indicative Time on Task 2: 20 hours

Due: **Due: Sunday 18th May 23:55**

Weighting: 30%

This assessment evaluates students' ability to apply cybersecurity concepts in a practical setting by demonstrating technical and theory based knowledge

On successful completion you will be able to:

- Demonstrate an understanding of technical concepts related to information security, computing, networking, and emerging technologies.
- Apply cyber hygiene principles to achieve personal security in the digital world
- Report on cyber criminality (in terms of activities, perpetrators and their motives) as well
 as its impact on society.
- Critically evaluate the relation between cyber security and privacy in the context of a legal and regulatory framework.
- Identify cybersecurity risks faced by businesses and relate the management of those risks to enterprise governance.

Final Take Home Essay

Assessment Type 1: Essay

Indicative Time on Task 2: 20 hours

Due: Due: Sunday 8th June 23:55

Weighting: 40%

A final essay is included as an assessment task for this unit. The student will have to complete the essay with scholarly references that will address a contemporary topic relating to Cyber Security.

On successful completion you will be able to:

- Demonstrate an understanding of technical concepts related to information security, computing, networking, and emerging technologies.
- Apply cyber hygiene principles to achieve personal security in the digital world
- Report on cyber criminality (in terms of activities, perpetrators and their motives) as well
 as its impact on society.
- Critically evaluate the relation between cyber security and privacy in the context of a legal and regulatory framework.
- Identify cybersecurity risks faced by businesses and relate the management of those risks to enterprise governance.

- ¹ If you need help with your assignment, please contact:
 - the academic teaching staff in your unit for guidance in understanding or completing this type of assessment
 - · the Writing Centre for academic skills support.

Delivery and Resources

Teaching and Learning Strategy

COMP1300 is taught via Live lectures (in class) and streamed via Echo. SGTA is taught via live classes on campus. The feedback that you receive in SGTA plays also a crucial role in your learning.

Lectures are used to introduce new material, give examples of the advances in Cyber Security and technologies and put them in a wider context. The unit is an introduction which in turn will be explored further in other units at Macquarie University.

SGTA classes are small group classes which give you the opportunity to interact with your peers and with a SGTA instructor who has a sound knowledge of the subject. This also gives you a chance to practice your soft skills.

You have many opportunities to seek for and to receive feedback. During lectures, you are encouraged to ask the lecturer questions to clarify anything you might not be sure of.

Week 1 classes

SGTA classes start in week 1 and the Lectures start in week 1. Week 1 lecture will be on Monday 24th February 2025.

Each week you should:

- Participate in live lectures, take notes, ask questions
- Participate in your SGTA classes and seek feedback from your SGTA instructor on your work
- Read assigned reading material, add to your notes and prepare questions for your lecturer or SGTA instructor
- Start working on any assessments immediately after they have been released.

Lecture notes are made available each week but these notes are intended as an outline of the lecture only and are not a substitute for your own notes or reading additional material. We release material usually in blocks of 2-3 weeks to not overwhelm students.

Classes

Each week you should participate in two hours of live lectures and a one hour SGTA class (on campus).

² Indicative time-on-task is an estimate of the time required for completion of the assessment task and is subject to individual variation

Please note that you are **required** to submit a certain number of assessments. Failure to do so may result in you failing the unit.

Methods of Communication

We will communicate with you via your university email and through announcements on iLearn. Queries to convenors can either be placed on the iLearn discussion board or sent to the unit convenor via the contact email on iLearn.

Textbook

Being a fast paced ever evolving unit, it was deemed that a textbook would not validate the complexity of Cyber Security.

Technology used and required

Echo

Digital recordings of lectures are available.

COMP1300 makes use of the following software in the lab:

- Microsoft Windows 10 +
- Microsoft Office 2016 +
- · Edge or Mozilla Firefox or Chrome or Opera

Website

The web page for this unit can be found at: http://ilearn.mq.edu.au.

Student Support Services

Macquarie University provides a range of Academic Student Support Services. Details of these services can accessed at http://www.student.mq.edu.au.

Assumed knowledge

Basic computer use skills.

Unit Schedule

Week	Lecture Topics/Events	SGTA/Assessment
1	When not if Intro to Cyber Security unit. (MM)	SGTA Workshop Week 1 Lectures start in week 1
2	Cyber Hygiene – How clean are you? (MM)	SGTA Workshop Week 2
3	The Human Factor (MM)	SGTA Workshop Week 3
4	Basics of Protection and Computing Basics for Cyber Security (MM)	SGTA Workshop Week 4

5	Cyber Security Management and Ethics Basics (MM)	SGTA Workshop Week 5
6	Societal Security (MM)	SGTA Workshop Week 6
7	Impact on Business and Cyber Governance – Who's loses their job? (YF)	SGTA Workshop Week 7 Assessment (Quiz) in SGTA
8	Cybercrime / Cybercriminals (YF)	SGTA Workshop Week 8
9	Cryptography (YF)	SGTA Workshop Week 9
10	IoT and Emerging Tech (YF)	SGTA Workshop Week 10 Assessment (Group Project) Due: Sunday 18th May 2025
11	Industry Experts (YF)	SGTA Workshop Week 11
12	The Future – How is Cyber Security going to impact us (YF)	SGTA Workshop Week 12
13	Discussion about the Final Report (MM / YF)	Wrap up and Cyber Security Ethics Simulation SGTA Workshop Week 13 Assessment (Individual Take Home Report) Due: Sunday 8th Jun 2025

Policies and Procedures

Macquarie University policies and procedures are accessible from Policy Central (https://policies.mq.edu.au). Students should be aware of the following policies in particular with regard to Learning and Teaching:

- Academic Appeals Policy
- Academic Integrity Policy
- Academic Progression Policy
- Assessment Policy
- Fitness to Practice Procedure
- Assessment Procedure
- Complaints Resolution Procedure for Students and Members of the Public
- Special Consideration Policy

Students seeking more policy resources can visit <u>Student Policies</u> (<u>https://students.mq.edu.au/support/study/policies</u>). It is your one-stop-shop for the key policies you need to know about throughout your undergraduate student journey.

To find other policies relating to Teaching and Learning, visit Policy Central (https://policies.mq.e du.au) and use the search tool.

Student Code of Conduct

Macquarie University students have a responsibility to be familiar with the Student Code of Conduct: https://students.mq.edu.au/admin/other-resources/student-conduct

Results

Results published on platform other than <u>eStudent</u>, (eg. iLearn, Coursera etc.) or released directly by your Unit Convenor, are not confirmed as they are subject to final approval by the University. Once approved, final results will be sent to your student email address and will be made available in <u>eStudent</u>. For more information visit <u>connect.mq.edu.au</u> or if you are a Global MBA student contact <u>globalmba.support@mq.edu.au</u>

Academic Integrity

At Macquarie, we believe <u>academic integrity</u> – honesty, respect, trust, responsibility, fairness and courage – is at the core of learning, teaching and research. We recognise that meeting the expectations required to complete your assessments can be challenging. So, we offer you a range of resources and services to help you reach your potential, including free <u>online writing and maths support</u>, academic skills development and wellbeing consultations.

Student Support

Macquarie University provides a range of support services for students. For details, visit http://students.mq.edu.au/support/

The Writing Centre

The Writing Centre provides resources to develop your English language proficiency, academic writing, and communication skills.

- Workshops
- Chat with a WriteWISE peer writing leader
- Access StudyWISE
- · Upload an assignment to Studiosity
- Complete the Academic Integrity Module

The Library provides online and face to face support to help you find and use relevant information resources.

- Subject and Research Guides
- Ask a Librarian

Student Services and Support

Macquarie University offers a range of Student Support Services including:

- IT Support
- · Accessibility and disability support with study

- Mental health support
- Safety support to respond to bullying, harassment, sexual harassment and sexual assault
- Social support including information about finances, tenancy and legal issues
- Student Advocacy provides independent advice on MQ policies, procedures, and processes

Student Enquiries

Got a question? Ask us via the Service Connect Portal, or contact Service Connect.

IT Help

For help with University computer systems and technology, visit http://www.mq.edu.au/about_us/ offices_and_units/information_technology/help/.

When using the University's IT, you must adhere to the <u>Acceptable Use of IT Resources Policy</u>. The policy applies to all who connect to the MQ network including students.

Changes from Previous Offering

We highly value student feedback as it allows us to continuously enhance the way our units are delivered. We encourage students to share constructive feedback through student surveys, directly with teaching staff, or via the FSE Student Experience & Feedback link on the iLearn page.

Over the past six years, the assessments have evolved based on student input. Through consultation, adjustments were made to the SGTA activities and assessment types, which are now reflected in iLearn.

Assessments have been changed and adjusted.

Unit information based on version 2025.02 of the Handbook