UNSW Course Outline

INFS5917 Managing Cloud and Network Security - 2024

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General Course Information

Course Code : INFS5917
Year : 2024
Term : Term 1
Teaching Period : T1
Is a multi-term course? : No
Faculty : UNSW Business School
Academic Unit : School of Information Systems and Technology Management
Delivery Mode : In Person
Delivery Format : Standard
Delivery Location : Kensington
Campus : Sydney
Study Level : Postgraduate
Units of Credit : 6

Useful Links

Handbook Class Timetable

Course Details & Outcomes

Course Description

This course provides a holistic overview on our use of digital communication technologies and examines the cyber security implications in contemporary business contexts. Students will develop knowledge and practical skills on digital communication infrastructure, models and

protocols, as well as on the People, Processes, and Technology components of cyber security. This course engages students in real-world organisational cyber security scenarios and digital sandbox environments to facilitate critical evaluations of technological and cyber security decisions in organisations, and develop practical solutions for organisational cyber security management.

Course Aims

This course aims to help students develop advanced concepts around computer networking infrastructure and cybersecurity. You will work on real work cases to explore the various forms of risks that impact modern connected workplaces and identify strategies to counter these.

Relationship to Other Courses

This course prompts you to think about your use of digital technology in todays highly connected environment, as well as its related security challenges. This course promotes a much needed awareness on the importance of responsible technology management, and prepares you with fundamental knowledge needed to understand the complexities of cyber security management and governance, and cloud architecture in the subsequent courses.

Course Learning Outcomes

Course Learning Outcomes	Program learning outcomes
CLO1 : Demonstrate ability to effectively communicate the current architecture of the Internet and the entities involved with the day to day running of digital communication technologies.	• PLO1 : Business Knowledge • PLO5 : Responsible Business Practice
CLO2 : Demonstrate ability to effectively communicate principles and policies of digital communication and cyber security, and explain their applications in various business contexts.	• PLO1 : Business Knowledge • PLO3 : Business Communication • PLO5 : Responsible Business Practice
CLO3 : Develop skills to analyse issues associated with business data networks and their security and to develop practical solutions towards their resolution.	• PLO1 : Business Knowledge • PLO5 : Responsible Business Practice
CLO4 : Demonstrate ability to evaluate relevant technical, managerial, and ethical considerations related to the design, deployment and/or the uses of secure technologies within various business contexts.	• PLO1 : Business Knowledge • PLO4 : Teamwork • PLO5 : Responsible Business Practice

Course Learning Outcomes	Assessment Item
CLO1 : Demonstrate ability to effectively communicate the current architecture of the Internet and the entities involved with the day to day running of digital communication technologies.	• Industry Project • Final Exam
CLO2 : Demonstrate ability to effectively communicate principles and policies of digital communication and cyber security, and explain their applications in various business contexts.	• Workshops • Industry Project • Final Exam
CLO3 : Develop skills to analyse issues associated with business data networks and their security and to develop practical solutions towards their resolution.	• Workshops • Industry Project
CLO4 : Demonstrate ability to evaluate relevant technical, managerial, and ethical considerations related to the design, deployment and/or the uses of secure technologies within various business contexts.	• Final Exam • Industry Project

Learning and Teaching Technologies

Moodle - Learning Management System

Learning and Teaching in this course

This course adopts a Sandbox approach (unsw.to/edusandbox) to facilitate the learning of career-relevant knowledge and skills. The learning process in this course is challenge-driven - you work with your peers, educators and an industry partner to complete hands-on tasks and projects that address real-world issues related to business networks and cyber security management. The lectures for this course are interactive - course concepts are introduced along with real-world case studies and scenarios. Tutorials are hands-on and involve lab work and simulation activities that allow you to explore the working of networking technologies and examine the security implications.Relevant resources will be provided to support students in this learning process. It is expected that students will spend approximately 12 hours per week working on this course. This time should be made up of reading, reflection and revision, working on problems, attending tutorials and lectures and collaboration with peers. In periods where students need to complete assignments, the workload may be greater

Additional Course Information

You are expected to attend all lecture and tutorials for this course, and engage with the learning activities deligently.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates	Program learning outcomes
Industry Project Assessment Format: Group	30%	Start Date: Not Applicable Due Date: Not Applicable	• PLO1 : Business Knowledge • PLO3 : Business Communication • PLO4 : Teamwork • PLO7 : Leadership Development
Workshops Assessment Format: Individual	30%	Start Date: Not Applicable Due Date: Not Applicable	• PLO1 : Business Knowledge • PLO3 : Business Communication • PLO6 : Global and Cultural Competence • PLO7 : Leadership Development
Final Exam Assessment Format: Individual	40%	Start Date: Not Applicable Due Date: Not Applicable	• PLO1 : Business Knowledge • PLO3 : Business Communication • PLO5 : Responsible Business Practice • PLO6 : Global and Cultural Competence • PLO7 : Leadership Development

Assessment Details

Industry Project

Assessment Overview

Students will work in small groups to solve real-world problems, and present their work to an audience.

Course Learning Outcomes

- CLO1 : Demonstrate ability to effectively communicate the current architecture of the Internet and the entities involved with the day to day running of digital communication technologies.
- CLO2 : Demonstrate ability to effectively communicate principles and policies of digital communication and cyber security, and explain their applications in various business contexts.
- CLO3 : Develop skills to analyse issues associated with business data networks and their security and to develop practical solutions towards their resolution.
- CLO4 : Demonstrate ability to evaluate relevant technical, managerial, and ethical considerations related to the design, deployment and/or the uses of secure technologies within various business contexts.

Detailed Assessment Description

You will be required to develop solutions for a real world business problem.

Assignment submission Turnitin type

This is not a Turnitin assignment

Workshops

Assessment Overview

Students will be expected to undertake and complete various in-class activities, and demonstrate their communication and teamwork skills.

Course Learning Outcomes

- CLO2 : Demonstrate ability to effectively communicate principles and policies of digital communication and cyber security, and explain their applications in various business contexts.
- CLO3 : Develop skills to analyse issues associated with business data networks and their security and to develop practical solutions towards their resolution.

Detailed Assessment Description

This will be weekly activities that you need to complete and have it marked by your tutor.

Assignment submission Turnitin type

This is not a Turnitin assignment

Final Exam

Assessment Overview

Students will be expected to apply the knowledge learned in the lectures and tutorials to engage in a meaningful conversation about a scenario about computer networking and cybersecurity challenge.

Course Learning Outcomes

- CLO1 : Demonstrate ability to effectively communicate the current architecture of the Internet and the entities involved with the day to day running of digital communication technologies.
- CLO2 : Demonstrate ability to effectively communicate principles and policies of digital communication and cyber security, and explain their applications in various business contexts.
- CLO4 : Demonstrate ability to evaluate relevant technical, managerial, and ethical considerations related to the design, deployment and/or the uses of secure technologies within various business contexts.

Detailed Assessment Description

This will be an invigilated oral assessment. More information will be provided in class.

Assignment submission Turnitin type

This is not a Turnitin assignment

General Assessment Information

As a student at UNSW you are expected to display academic integrity in your work and interactions. Where a student breaches the UNSW Student Code with respect to academic integrity, the University may take disciplinary action under the Student Misconduct Procedure. To assure academic integrity, you may be required to demonstrate reasoning, research and the process of constructing work submitted for assessment.

To assist you in understanding what academic integrity means, and how to ensure that you do comply with the UNSW Student Code, it is strongly recommended that you complete the Working with Academic Integrity module before submitting your first assessment task. It is a free, online self-paced Moodle module that should take about one hour to complete.

You are expected to complete all assessment tasks for your courses in the School of Information Systems and Technology Management. Classes are highly practical and relevant to your assessments, so you are expected to attend at least 80% of all scheduled classes.

Where group assignments are used, team members are expected to work in a harmonious and professional fashion, which includes adequate management of non-performing members. You should inform your tutor as soon as possible if you experience problems within a project team. You may be required to evaluate the contribution of each team member (including yourself) in group work and marks for individual students may be adjusted based on peer assessment.

Grading Basis

Standard

Requirements to pass course

You need to get a minimum of 50% to pass the course.

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 12 February - 18 February	Lecture	Fundamentals of Networking (Part I) -
	Tutorial	Tutorial Exercises based on Lecture topics Workshop, i.e., Tutorial Exercises
Week 2 : 19 February - 25 February	Lecture	Fundamentals of Networking (Part II) -
	Tutorial	Tutorial Exercises based on Lecture topics Workshop, i.e., Tutorial Exercises
Week 3 : 26 February - 3 March	Lecture	Fundamentals of Cyber Security (Part I) -
	Tutorial	Tutorial Exercises based on Lecture topics Workshop, i.e., Tutorial Exercises
Week 4 : 4 March - 10 March	Lecture	Fundamentals of Cyber Security (Part II) -
	Tutorial	Tutorial Exercises based on Lecture topics Workshop, i.e., Tutorial Exercises
Week 5 : 11 March - 17 March	Lecture	The People, Processes, and Technology of Cyber Security (Part I) -
	Tutorial	Tutorial Exercises based on Lecture topics Workshop, i.e., Tutorial Exercises
Week 6 : 18 March - 24 March	Other	Recharge Week
	Other	
Week 7 : 25 March - 31 March	Lecture	The People, Processes, and Technology of Cyber Security (Part II) -
	Tutorial	Tutorial Exercises based on Lecture topics Workshop, i.e., Tutorial Exercises
Week 8 : 1 April - 7 April	Lecture	The People, Processes, and Technology of Cyber Security (Part III) -
	Tutorial	Tutorial Exercises based on Lecture topics Workshop, i.e., Tutorial Exercises
Week 9 : 8 April - 14 April	Lecture	Responsible Management of Technologies (Part I) -
	Tutorial	Tutorial Exercises based on Lecture topics Workshop, i.e., Tutorial Exercises
Week 10 : 15 April - 21 April	Lecture	Responsible Management of Technologies (Part II) Industry Project
	Tutorial	Tutorial Exercises based on Lecture topics Group Presentation

Attendance Requirements

Students are strongly encouraged to attend all classes and review lecture recordings.

Course Resources

Prescribed Resources

All course materials and announcement will be posted on Moodle: https://moodle.telt.unsw.edu.auThere is no required textbook for this course. Recommended readings will be published on Moodle.

Course Evaluation and Development

Youe will be prompted to provide both formal and informal feedback about the course. this will be used to hlp us improve the course for the current and future terms.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Pranit Anand		Quadrangle 2076			No	Yes

Other Useful Information

Academic Information

COURSE POLICIES AND SUPPORT

The Business School expects that you are familiar with the contents of this course outline and the UNSW and Business School learning expectations, rules, policies and support services as listed below:

- Program Learning Outcomes
- Academic Integrity and Plagiarism
- Student Responsibilities and Conduct
- Special Consideration
- Protocol for Viewing Final Exam Scripts
- Student Learning Support Services

Further information is provided on the key policies and support page.

Students may not circulate or post online any course materials such as handouts, exams, syllabi or similar resources from their courses without the written permission of their instructor.

STUDENT LEARNING OUTCOMES

The Course Learning Outcomes (CLOs) – under the Outcomes tab – are what you should be able to demonstrate by the end of this course, if you participate fully in learning activities and successfully complete the assessment items.

CLOs also contribute to your achievement of the Program Learning Outcomes (PLOs), which are

developed across the duration of a program. PLOs are, in turn, directly linked to UNSW graduate capabilities. More information on Coursework PLOs is available on the key policies and support page. For PG Research PLOs, including MPDBS, please refer to the UNSW HDR Learning Outcomes.

Academic Honesty and Plagarism

As a student at UNSW you are expected to display academic integrity in your work and interactions. Where a student breaches the UNSW Student Code with respect to academic integrity, the University may take disciplinary action under the Student Misconduct Procedure. To assure academic integrity, you may be required to demonstrate reasoning, research and the process of constructing work submitted for assessment.

To assist you in understanding what academic integrity means, and how to ensure that you do comply with the UNSW Student Code, it is strongly recommended that you complete the Working with Academic Integrity module before submitting your first assessment task. It is a free, online self-paced Moodle module that should take about one hour to complete.

Submission of Assessment Tasks

SPECIAL CONSIDERATION

You can apply for special consideration when illness or other circumstances beyond your control interfere with your performance in a specific assessment task or tasks, including online exams. Students studying remotely who have exams scheduled between 10pm and 7am local time, are also able to apply for special consideration to sit a supplementary exam at a time outside of these hours.

Special consideration is primarily intended to provide you with an extra opportunity to demonstrate the level of performance of which you are capable. To apply, and for further information, see Special Consideration on the UNSW Current Students page.

Special consideration applications will be assessed centrally by the Case Review Team, who will update the online application with the outcome and add any relevant comments. The change to the status of the application immediately sends an email to the student and to the assessor with the outcome of the application.

Please note the following:

1. Applications can only be made through Online Services in myUNSW (see the UNSW Current Students page). Applications will not be accepted by teaching staff. The lecturer-in-charge/ course coordinator will be automatically notified when your application is processed.
2. Applying for special consideration does not automatically mean that you will be granted a supplementary exam or other concession.
3. If you experience illness or misadventure in the lead up to an exam or assessment, you must submit an application for special consideration, either prior to the examination taking place, or prior to the assessment submission deadline, except where illness or misadventure prevent you from doing so.
4. If your circumstances stop you from applying before your exam or assessment due date, you must apply within 3 working days of the assessment or the period covered by your supporting documentation.
5. Under the UNSW Fit To Sit/Submit rule, if you sit the exam/submit an assignment, you are declaring yourself well enough to do so and are cannot subsequently apply for special consideration.
6. If you become unwell on the day of – or during – an exam, you must stop working on your exam, advise your course coordinator or tutor and provide a medical certificate dated within 24 hours of the exam, with your special consideration application. For online exams, you must contact your course coordinator or tutor immediately via email, Moodle or chat and advise them you are unwell and submit screenshots of your conversation along with your medical certificate and application.
7. Special consideration requests do not allow the awarding of additional marks to students.

Further information on Business School policy and procedure can be found under “Special Consideration” on the key policies and support page.

LATE SUBMISSION PENALTIES

For assessments other than examinations, late submission will incur a penalty of 5% per day or part thereof (including weekends) from the due date and time. An assessment will not be accepted after 5 days (120 hours) of the original deadline unless special consideration has been approved. An assignment is considered late if the requested format, such as hard copy or electronic copy, has not been submitted on time or where the ‘wrong’ assignment has been submitted.

For assessments which account for 10% or less of the overall course grade, and where answers are immediately discussed or debriefed, the LIC may stipulate a different penalty. Details of such late penalties will be available on the course Moodle page.

FEEDBACK ON YOUR ASSESSMENT TASK PERFORMANCE

Feedback on student performance from formative and summative assessment tasks will be provided to students in a timely manner. Assessment tasks completed within the teaching period of a course, other than a final assessment, will be assessed and students provided with feedback, with or without a provisional result, within 10 working days of submission, under normal circumstances. Feedback on continuous assessment tasks (e.g. laboratory and studio-based, workplace-based, weekly quizzes) will be provided prior to the midpoint of the course.

Faculty-specific Information

PROTOCOL FOR VIEWING FINAL EXAM SCRIPTS

UNSW students have the right to view their final exam scripts, subject to a small number of very specific exemptions. The UNSW Business School has set a protocol under which students may view their final exam script. Individual schools within the Faculty may also set up additional local processes for viewing final exam scripts, so it is important that you check with your School.

If you are completing courses from the following schools, please note the additional school-specific information:

- Students in the **School of Accounting, Auditing & Taxation** who wish to view their final examination script should also refer to this page.
- Students in the **School of Banking & Finance** should also refer to this page.
- Students in the **School of Information Systems & Technology Management** should also refer to this page.

COURSE EVALUATION AND DEVELOPMENT

Feedback is regularly sought from students and continual improvements are made based on this feedback. At the end of this course, you will be asked to complete the myExperience survey, which provides a key source of student evaluative feedback. Your input into this quality enhancement process is extremely valuable in assisting us to meet the needs of our students and provide an effective and enriching learning experience. The results of all surveys are carefully considered and do lead to action towards enhancing educational quality.

QUALITY ASSURANCE

The Business School is actively monitoring student learning and quality of the student experience in all its programs. A random selection of completed assessment tasks may be used for quality assurance, such as to determine the extent to which program learning goals are being

achieved. The information is required for accreditation purposes, and aggregated findings will be used to inform changes aimed at improving the quality of Business School programs. All material used for such processes will be treated as confidential.

TEACHING TIMES AND LOCATIONS

Please note that teaching times and locations are subject to change. Students are strongly advised to refer to the Class Timetable website for the most up-to-date teaching times and locations.