



UNSW Course Outline

ELEC4951 Research Thesis A - 2024

Published on the 29 May 2024

General Course Information

Course Code : ELEC4951

Year : 2024

Term : Term 2

Teaching Period : T2

Is a multi-term course? : No

Faculty : Faculty of Engineering

Academic Unit : School of Electrical Engineering & Telecommunications

Delivery Mode : In Person

Delivery Format : Standard

Delivery Location : Sydney

Campus : Sydney

Study Level : Undergraduate

Units of Credit : 4

Useful Links

[Handbook Class Timetable](#)

Course Details & Outcomes

Course Description

The thesis is an inquiry-based learning course that provides students with an opportunity to bring together and apply engineering principles learned over their previous years of study and professional experience to innovatively solve problems such as the development of a specific

design, process and/or the investigation of a hypothesis.

The thesis projects that students undertake are complex, open-ended problems that allow room for creativity, acquisition, analysis and interpretation of results. There are multiple possible solutions or conclusions at the outset that have sufficient complexity to require a degree of project planning from the students. The thesis requires students to formulate problems in scientific or engineering terms, manage a technical project and find solutions by applying scientific and engineering methods. It also allows them to develop the ability to work in a research and development environment.

This is the first course in the three-course thesis structure. The course is normally undertaken in the last year of the BE degree program. Students undertake directed laboratory and research work on an approved topic under the guidance of an academic supervisor. A student must identify a supervisor and a project prior to enrolling in this course.

Course Aims

The aim of the course is to enable students to: (a) develop critical thinking and knowledge in the academic and professional literature on a particular topic; (b) formulate problems in technical terms, manage the project, and find solutions by applying engineering and/or scientific methods; (c) explain how their projects fit within the discipline and broader societal context; (d) demonstrate their ability to work autonomously in a research and development environment; (e) communicate knowledge, skills, and ideas to professional and lay audiences.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : Develop a design or a process or investigate a hypothesis following industry and professional engineering standards.
CLO2 : Critically reflect on a specialist body of knowledge related to their thesis topic.
CLO3 : Apply scientific and engineering methods to solve an engineering problem.
CLO4 : Analyse data objectively using quantitative and mathematical methods.
CLO5 : Demonstrate oral and written communication in professional and lay domains.

Course Learning Outcomes	Assessment Item
CLO1 : Develop a design or a process or investigate a hypothesis following industry and professional engineering standards.	<ul style="list-style-type: none">• Interim report• Thesis C• Thesis B
CLO2 : Critically reflect on a specialist body of knowledge related to their thesis topic.	<ul style="list-style-type: none">• Seminar• Interim report• Thesis C• Thesis B
CLO3 : Apply scientific and engineering methods to solve an engineering problem.	<ul style="list-style-type: none">• Interim report• Thesis C• Thesis B
CLO4 : Analyse data objectively using quantitative and mathematical methods.	<ul style="list-style-type: none">• Seminar• Interim report• Thesis C• Thesis B
CLO5 : Demonstrate oral and written communication in professional and lay domains.	<ul style="list-style-type: none">• Seminar• Interim report• Thesis C• Thesis B

Learning and Teaching Technologies

Moodle - Learning Management System | Microsoft Teams

Other Professional Outcomes

The Course Learning Outcomes (CLOs) contribute to the Engineers Australia (National Accreditation Body) Stage I competencies as outlined below

Engineers Australia (EA), Professional Engineer Stage 1 Competencies

PE1: Knowledge and Skill Base:

PE1.1 Comprehensive, theory-based understanding of underpinning fundamentals: n/a

PE1.2 Conceptual understanding of underpinning maths, analysis, statistics, computing: CLO 1,3, 4.

PE1.3 In-depth understanding of specialist bodies of knowledge: CLO 1, 2, 3, 4, 5.

PE1.4 Discernment of knowledge development and research directions: CLO 2.

PE1.5 Knowledge of engineering design practice: CLO 1, 3.

PE1.6 Understanding of scope, principles, norms, accountabilities of sustainable engineering practice: CLO 1,3

PE2: Engineering Application Ability:

PE2.1 Application of established engineering methods to complex problem solving: CLO 1, 3, 4.

PE2.2 Fluent application of engineering techniques, tools and resources: CLO 1, 3, 4

PE2.3 Application of systematic engineering synthesis and design processes: CLO 1,3

PE2.4 Application of systematic approaches to the conduct and management of engineering projects: CLO 1,3

PE3: Professional and Personal Attributes:

PE3.1 Ethical conduct and professional accountability: CLO 1,2,5

PE3.2 Effective oral and written communication (professional and lay domains): CLO 2,5

PE3.3 Creative, innovative and pro-active demeanour: CLO 1,3,5

PE3.4 Professional use and management of information: n/a

PE3.5 Orderly management of self, and professional conduct: n/a

PE3.6 Effective team membership and team leadership: n/a

This course is also designed to provide the course learning outcomes which arise from targeted graduate capabilities. The targeted graduate capabilities broadly support the UNSW and Faculty of Engineering graduate capabilities (also listed below).

Targeted Graduate Capabilities

Electrical Engineering and Telecommunications programs are designed to address the following targeted capabilities which were developed by the school in conjunction with the requirements of professional and industry bodies:

- The ability to apply knowledge of basic science and fundamental technologies;
- The skills to communicate effectively, not only with engineers but also with the wider community;

- The capability to undertake challenging analysis and design problems and find optimal solutions;
- Expertise in decomposing a problem into its constituent parts, and in defining the scope of each part;
- A working knowledge of how to locate required information and use information resources to their maximum advantage;
- Proficiency in developing and implementing project plans, investigating alternative solutions, and critically evaluating differing strategies;
- An understanding of the social, cultural and global responsibilities of the professional engineer;
- The ability to work effectively as an individual or in a team;
- An understanding of professional and ethical responsibilities;
- The ability to engage in lifelong independent and reflective learning

UNSW Graduate Capabilities

The course delivery methods and course content directly or indirectly addresses a number of core UNSW graduate capabilities, as follows:

- Developing scholars who have a deep understanding of their discipline, through lectures and solution of analytical problems in tutorials and assessed by assignments and written examinations.
- Developing rigorous analysis, critique, and reflection, and ability to apply knowledge and skills to solving problems. These will be achieved by the laboratory experiments and interactive checkpoint assessments and lab exams during the labs.
- Developing capable independent and collaborative enquiry, through a series of tutorials spanning the duration of the course.
- Developing independent, self-directed professionals who are enterprising, innovative, creative and responsive to change, through challenging design and project tasks.
- Developing citizens who can apply their discipline in other contexts, are culturally aware and environmentally responsible, through interdisciplinary tasks, seminars and group activities

Additional Course Information

Credits

This is a 4 UOC, level 4 course. The expected workload is 10 hours per week throughout the term. It is important to note that the weighting of the course is equivalent to 2.1 UOC from the available overall 12 UOC for Thesis course.

Relationship to Other Courses

This is a fourth-year core course for students following a BE (Electrical or Telecommunications or Quantum) program in the EE&T School and other combined degree programs. This course

constitutes the first part (Thesis A) of the three-part thesis work (Thesis A, B and C). It involves a detailed literature search and reviews of the background for the chosen topic, familiarisation with the tools or equipment required for the project, some preliminary design/developmental work, and formulation of a research plan. This prepares the student for the detailed project work that will be undertaken in Thesis B and C in the following subsequent two terms.

Pre-requisites and Assumed Knowledge.

The pre-requisite for this course is completion of 126 UOC and third year core courses.

Following Courses

The course is a pre-requisite for ELEC4952 which must be taken in the immediately following term.

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Interim report Assessment Format: Individual	10%	
Thesis C Assessment Format: Individual	72.5%	
Seminar Assessment Format: Individual	7.5%	
Thesis B Assessment Format: Individual	10%	

Assessment Details

Interim report

Assessment Overview

An individually written report is to be submitted in week 10, by uploading the report as one single pdf formatted file. This file should include, as the first page, a scanned image of the report cover sheet. The report cover sheet can be downloaded from the course website. The report must also include an Appendix for a scanned copy of the completed Risk Assessment Form. If using double space and size 12 font, a typical report is about 15 to 25 pages.

The report should contain the following elements:

- Abstract / Table of contents / Introduction / Body / Conclusion.
- Project definition, which includes the problem statement, and motivation for trying to solve this particular problem, possible solutions to the problem along with their pros and cons, and challenges.
- Literature review. Description of preliminary work – although much of the design and synthesis will be carried out in Thesis B, it would be expected that preliminary work would be carried out in Thesis A.
- Time outline for tasks planned in Thesis B and C. This should be more than just a simple Gantt chart and include a description of the work required to be carried out in Thesis B and C. Also include possible perceived problems or risks encountered which could change the schedule and planned work.

The assessment will be done by the supervisor and an assessor whose marks are equally weighted. The assessor is an academic staff assigned by the school. The marking is done independently by each marker, without collusion or knowledge of the other mark. The marking is based on a standard rubric and feedback is given either verbally or through comments posted on Moodle.

Course Learning Outcomes

- CL01 : Develop a design or a process or investigate a hypothesis following industry and professional engineering standards.
- CL02 : Critically reflect on a specialist body of knowledge related to their thesis topic.
- CL03 : Apply scientific and engineering methods to solve an engineering problem.
- CL04 : Analyse data objectively using quantitative and mathematical methods.
- CL05 : Demonstrate oral and written communication in professional and lay domains.

Assessment Length

15 - 25 pages

Submission notes

Students first submit their report for the Turnitin check. Once the similarity is below 15%, they then submit their report using the "PART A REPORT ASSESSMENT" workshop tool.

Assessment information

Reviewing work of others (50%)

Marking guide:

0-49: Deficient

50-64: Adequate

65-74: Solid

75-84: Solid and linked

85-100: Of review paper quality

Project planning and work completed (40%)

Marking guide:

0-49: Broad context missing

50-64: Broad context present. No specific plan

65-74: Broad context present. Specific logical plan

75-84: Broad context present. Specific logical plan. Plan fits the review narrative. Completion of preparatory work for the project.

85-100: Broad context present. Specific and robust logical plan. Plan fits the review narrative. Well into execution of the main project with actual completion of some initial tasks.

Document presentation (10%)

Marking guide:

0-49: Impedes document reading

50-64: Poor formatting/document structure

65-74: Poor judgment with respect to layout, possible padding

75-84: Professional, may have issues with data presentation

85-100: Professional, concise and readable

Assignment submission Turnitin type

This assignment is submitted through Turnitin and students can see Turnitin similarity reports.

Thesis C

Assessment Overview

After students satisfactorily pass the Thesis B assessments in the following term, they will be

able to progress into the third stage of the thesis in the third term. This assessment item is for the assessments in the third stage of the thesis, which contributes 72.5% towards the overall weighting.

Course Learning Outcomes

- CL01 : Develop a design or a process or investigate a hypothesis following industry and professional engineering standards.
- CL02 : Critically reflect on a specialist body of knowledge related to their thesis topic.
- CL03 : Apply scientific and engineering methods to solve an engineering problem.
- CL04 : Analyse data objectively using quantitative and mathematical methods.
- CL05 : Demonstrate oral and written communication in professional and lay domains.

Hurdle rules

In order to do Thesis C, you must successfully pass Thesis B.

Seminar

Assessment Overview

During week 8 (or week 9 depending on scheduling), students are required to give a seminar presentation describing their work on the topic. The seminars will take place at the times and locations agreed upon between the students and their markers. The duration of each seminar will be 30 minutes.

The seminar provides students the opportunity to inform and demonstrate their communication skills. Technical skill is very important; but just as important is the ability to talk about their work in an informative and convincing way. Their talk should be addressed both to their examiners who will need to know details about their progress with the topic, and to students and staff members having a more general interest in the thesis.

The seminar might have the following outline:

- Thesis definition - what is the problem you are trying to solve including motivation.
- Background and literature review.
- Description of preliminary work such as simulation, modelling, experimental procedure.
- Outline and timetable schedule for work in Thesis B and C in the following terms.

The assessment will be done by the supervisor and an assessor whose marks are equally weighted. The assessor is an academic staff assigned by the school. The marking is done independently by each marker, without collusion or knowledge of the other mark. The marking is based on a standard rubric and feedback is given either verbally or through comments posted on Moodle.

Course Learning Outcomes

- CL02 : Critically reflect on a specialist body of knowledge related to their thesis topic.
- CL04 : Analyse data objectively using quantitative and mathematical methods.
- CL05 : Demonstrate oral and written communication in professional and lay domains.

Detailed Assessment Description

PowerPoint slides or Acrobat PDF for presentation are recommended.

Assessment information

Assessment criteria

The marking is based on 5 assessment criteria: subject matter (30%), preliminary work and plan (25%), quality (15%), presentation (15%), and question handling (15%)

Additional details

Subject matter:

Context of problems and underlying theory, possible solutions and reasons for choice made, difficulties to be overcome, relations to published work, etc

0-49: Deficient – trivial or of sub-standard engineering value

50-64: Adequate – straightforward, require only basic engineering skills to solve problem

65-74: Good – challenging problem, require a fair amount of disciplinary knowledge and skills

75-84: Very good – very challenging problem, require in-depth disciplinary knowledge and skills

85-100: Excellent – highly-challenging problem, require in-depth disciplinary knowledge, acquire new skills or interdisciplinary knowledge.

Quality:

Quality of thesis work revealed by seminar, degree of challenge, innovation.

0-49: Deficient, poor – fundamental deficiencies in one or more critical aspects of the work

50-64: Adequate – one or more major deficiencies; work is marginal technically

65-74: Good – one or more significant deficiencies but overall work is sound

75-84: Very good – professional, only one or more minor deficiencies

85-100: Excellent – all aspects of the work exhibit impeccable scholarship

Preliminary work and plan:

Project planning, skills (including resources and training required) identified and acquired, and preliminary results revealed by seminar

0-49: Deficient, poor – no evidence of project planning or identification of skills (including resources and training)

50-64: Adequate – some evidence of project planning and identification of skills (including resources and training)

65-74: Good – good evidence of project planning and acquiring skills (including resources and training)

75-84: Very good – high evidence of project planning and acquiring skills (including resources and training)

85-100: Excellent – demonstrated well thought project planning and significant preliminary results

Presentation:

English usage, rate of speech and audibility, clarity of description and relevance, use of aids, platform manner, logical structure of the presentation, quality of summary sheet.

0-49: Poor visual and oral dissemination; you are left unsure what the work is about

50-64: Adequate, able to articulate the problem or concept involved in the work

65-74: Good storytelling with use of graphics, images, facts, data, etc.

75-84: Professional presentation; audience gets a clear understanding about the work

85-100: Excellent, high impact, engaging, audience will long remember

Question handling:

Degree of competence in answering the questions.

0-49: Unable to answer questions or attempt to answer but clearly doesn't really understand

50-64: Able to answer questions but there are flaws. Nevertheless, you are fairly sure they understand what they're doing

65-74: Able to answer questions with only minor flaws; you are sure they have reasonably good understanding about their work

75-84: Able to answer questions easily and directly, almost flawless

85-100: In-depth flawless answers that demonstrate commanding knowledge of the subject

Thesis B

Assessment Overview

After students satisfactorily pass the above two assessments (Interim report and seminar), they will be able to progress into the second stage of the thesis in the following term. This assessment item includes the assessments in the second stage of the thesis, ELEC4952 (Thesis B), which contributes 10% towards the overall weighting of the thesis.

Course Learning Outcomes

- CL01 : Develop a design or a process or investigate a hypothesis following industry and professional engineering standards.
- CL02 : Critically reflect on a specialist body of knowledge related to their thesis topic.
- CL03 : Apply scientific and engineering methods to solve an engineering problem.
- CL04 : Analyse data objectively using quantitative and mathematical methods.
- CL05 : Demonstrate oral and written communication in professional and lay domains.

General Assessment Information

Assessment is based on evaluating the student's work through the interim report (57%) and online seminar (43%). The assessment will be carried out by the thesis supervisor and the thesis assessor whose marks are equally weighed. The assessor is an academic staff assigned by the School. The same assessor will be assigned for Thesis C. The marking is done independently by each marker, without collusion or knowledge of the other mark. If there is a significant difference between the two marks for the report (>10%), the Thesis Coordinator has the discretion to decide the next course of action, e.g. ask the two markers to review their marks.

It is intended that Thesis A covers the planning, preparing and completing some initial work on

the project. To measure these achievements through the report and online seminar, the marking breakdowns are: (i) 50% on gathering, understanding and prioritizing relevant technical background about the project, literature review and the problem statement; (ii) 20% on project planning (proposed solution or methodology, project timeline, identification of resources and skills; (iii) 20% on project preparation (skills acquired, training completed, preliminary results, risk assessment) and (iii) 10% on the presentation.

It is most important to note that Thesis A is not just about doing a literature review, but students must demonstrate real progress in the project with tangible project deliverables.

Policy for lateness

The penalty is detailed below:

- For thesis seminar - zero (0) mark is awarded
- For thesis report - 5 marks off the thesis for every day late. Penalty applies until the marks for the course decrease to 50, and further lateness does not result in failure of the course, but might be a failure of the thesis (weekends count as days). Any thesis report not turned in within 6 weeks after the deadline will be finalised at zero (0) marks.

In all cases, applications for late submission can be applied for BEFORE the due date. This is at the discretion of the thesis coordinator, but should only be granted in exceptional circumstances. As per normal, students can also apply through myUNSW for special consideration.

Grading Basis

Standard

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 27 May - 2 June	Lecture	Overview of thesis work -Introductory talk by Thesis Coordinator
	Online Activity	4pm Friday: deadline for registering your thesis topic and supervisor name via Moodle portal 'EET School Thesis/Project'
Week 2 : 3 June - 9 June	Online Activity	Provide Thesis details for each assessment via the Moodle course page 'ELEC4951/9451-Research Thesis A/Masters Project A T2 2024' For start, provide preliminary thesis topic, your name and supervisor's name urgently. Final thesis topic can be updated at this till week 8. The details should be provided for each assessment. In this course, the assessments are PART A SEMINAR ASSESSMENT and PART A REPORT ASSESSMENT. To provide the details for PART A SEMINAR ASSESSMENT, follow the steps below. <ul style="list-style-type: none"> • Go to Thesis A Seminar (click to expand the section) • Click on PART A SEMINAR ASSESSMENT and follow the prompt. To provide the details for PART A REPORT ASSESSMENT, follow the steps below. <ul style="list-style-type: none"> • Go to Thesis A Report (click to expand the section) • Click on PART A REPORT ASSESSMENT and follow the prompt
	Lecture	• Thesis guide – Online seminar by Prof. Victor Solo
Week 5 : 24 June - 30 June	Other	<ul style="list-style-type: none"> • Risk Management Form completed and approved by supervisor. • If applicable, ethics approval required from relevant authority
Week 8 : 15 July - 21 July	Seminar	Seminar schedules will be released in Week 7. The seminars are scheduled to run in week 8 and 9. Students will present their seminar at their scheduled time, date and place.
Week 9 : 22 July - 28 July	Assessment	Seminar schedules will be released in Week 7. The seminars are scheduled to run in week 8 and 9. Students will present their seminar at their scheduled time, date and place.
Week 10 : 29 July - 4 August	Assessment	Interim report is to be submitted via Moodle by 12pm Thursday

Attendance Requirements

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

General Schedule Information

Period Activity Prior to start of the term, student selects thesis topic and gets approval from supervisor. Weekly Online meetings during the term with supervisor for technical guidance on thesis work Laboratory work during the term subject to arrangement with technical staff Week 1 Overview of thesis work - Introductory talk by Thesis Coordinator 4pm Friday: deadline for registering your thesis topic and supervisor name via Moodle portal 'EET School Thesis/Project'

Week 1-2 Provide Thesis details for each assessment via the Moodle course page 'T2 2023 ELEC4951/9451-Research Thesis A/Masters Project A ' For start, provide general thesis topic, your name and supervisor's name urgently. Thesis topic can be updated at this till week 8. The details should be provided for each assessment. In this course, the assessments are PART A SEMINAR ASSESSMENT and PART A REPORT ASSESSMENT. To provide the details for PART A SEMINAR ASSESSMENT, follow the steps below. Go to Thesis A Seminar (click to expand the section) Click on PART A SEMINAR ASSESSMENT and follow the prompt. To provide the details for PART A REPORT ASSESSMENT, follow the steps below. Go to Thesis A Report (click to

expand the section) Click on PART A REPORT ASSESSMENT and follow the prompt Week 2 Thesis guide - Online seminar by Prof. Victor Solo Week 5 Risk Management Form completed and approved by supervisor. If applicable, ethics approval required from relevant authority Week 8-9 Online Seminars, schedules to be announced during Week 7 Week 10 12pm Thursday: deadline for submission of your report via Moodle.

Course Resources

Prescribed Resources

Recommended text(s):

Reading materials are specified by the supervisor (related to particular thesis topic).

On-line resourcesMoodle

As a part of the teaching component, Moodle will be used to disseminate materials, host forums: <https://moodle.telt.unsw.edu.au/login/index.php>. All information about this course is available from this link which is regularly updated.

Mailing list

Announcements concerning course information will be given on Moodle and/or via email (which will be sent to your student email address).

ADDITIONAL INFORMATION ABOUT THE THESIS

How to nominate a thesis topic

The Moodle portal 'EET School Thesis/Project' helps you find a supervisor and register a thesis topic to work on. Preferably, this should be done well before the start of the semester. Follow these steps:

- Go to <https://moodle.telt.unsw.edu.au/course/view.php?id=20890> and enrol yourself as a student; the self-enrolment key is EETTPstudent.
- From here, you can view the research profiles of prospective supervisors and topics by clicking on the 'Research Topics' icon. Please note that the topics list is only indicative and may not show all the topics available. Supervisors may have other new topics in mind or you may want to propose your own topic that matches the supervisor's interests and expertise.

When you have found a supervisor with a topic that suits your interests, you are required to

contact this person to discuss your intention. If you both agree to team up, ask the supervisor to email you to confirm approval of the topic title. You can then proceed to register your topic:

- Go into Moodle 'EET School Thesis/Project', click 'Select Your Supervisor' icon then click 'Select Supervisor'. Find your supervisor name and click the action box to become a member.
- From the home page, click 'Select Your Supervisor' icon then click 'Register Topic', 'Add Entry' and enter your details and topic title.
- You now have formally secured a supervisor with a specific topic to work on in the forthcoming semester. Furthermore, you must enrol in the appropriate thesis course code on myUNSW, as you would normally enroll in other courses. This will give you access to the main Moodle page for the course ELEC4951/9451.

Risk Management

Your thesis work may involve practical experiments in the laboratory or only using office computers. Regardless of the nature of your thesis work, you must do a risk assessment before commencing. The Risk Management Form has to be completed, approved by your supervisor and attached as an appendix to the Thesis A report. If applicable, also attach appropriate ethics approvals as an appendix. Please refer to the [UNSW Health & Safety website](#) for information on how to complete a Risk Management Form, and on risks associated with certain tasks. If you are having trouble navigating the website, please contact the School's Health & Safety Advisor, [Emilio Saliba](#).

For access requirements to Labs and offices, please click [HERE](#) and follow the instructions as soon as possible.

Recommended Resources

Recommended resources are project specific. Students should discuss for specific resources relevant to their project with their supervisor.

Laboratory Workshop Information

Laboratory access is project specific. Students should consult with their respective supervisor in relation to laboratory access and workshop information.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Aron Michael		G17, 124	02 93855663	Monday 4:00-4:30pm	No	Yes

Other Useful Information

Academic Information

I. Special consideration and supplementary assessment

If you have experienced an illness or misadventure beyond your control that will interfere with your assessment performance, you are eligible to apply for Special Consideration prior to, or within 3 working days of, submitting an assessment or sitting an exam.

Please note that UNSW has a Fit to Sit rule, which means that if you sit an exam, you are declaring yourself fit enough to do so and cannot later apply for Special Consideration.

For details of applying for Special Consideration and conditions for the award of supplementary assessment, please see the information on UNSW's [Special Consideration page](#).

II. Administrative matters and links

All students are expected to read and be familiar with UNSW guidelines and policies. In particular, students should be familiar with the following:

- [Attendance](#)
- [UNSW Email Address](#)
- [Special Consideration](#)
- [Exams](#)
- [Approved Calculators](#)
- [Academic Honesty and Plagiarism](#)
- [Equitable Learning Services](#)

III. Equity and diversity

Those students who have a disability that requires some adjustment in their teaching or learning environment are encouraged to discuss their study needs with the course convenor prior to, or at the commencement of, their course, or with the Equity Officer (Disability) in the Equitable

Learning Services. Issues to be discussed may include access to materials, signers or note-takers, the provision of services and additional exam and assessment arrangements. Early notification is essential to enable any necessary adjustments to be made.

IV. Professional Outcomes and Program Design

Students are able to review the relevant professional outcomes and program designs for their streams by going to the following link: <https://www.unsw.edu.au/engineering/student-life/student-resources/program-design>.

Note: This course outline sets out the description of classes at the date the Course Outline is published. The nature of classes may change during the Term after the Course Outline is published. Moodle or your primary learning management system (LMS) should be consulted for the up-to-date class descriptions. If there is any inconsistency in the description of activities between the University timetable and the Course Outline/Moodle/LMS, the description in the Course Outline/Moodle/LMS applies.

Academic Honesty and Plagiarism

UNSW has an ongoing commitment to fostering a culture of learning informed by academic integrity. All UNSW students have a responsibility to adhere to this principle of academic integrity. Plagiarism undermines academic integrity and is not tolerated at UNSW. *Plagiarism at UNSW is defined as using the words or ideas of others and passing them off as your own.*

Plagiarism is a type of intellectual theft. It can take many forms, from deliberate cheating to accidentally copying from a source without acknowledgement. UNSW has produced a website with a wealth of resources to support students to understand and avoid plagiarism, visit: student.unsw.edu.au/plagiarism. The Learning Centre assists students with understanding academic integrity and how not to plagiarise. They also hold workshops and can help students one-on-one.

You are also reminded that careful time management is an important part of study and one of the identified causes of plagiarism is poor time management. Students should allow sufficient time for research, drafting and the proper referencing of sources in preparing all assessment tasks.

Repeated plagiarism (even in first year), plagiarism after first year, or serious instances, may also be investigated under the Student Misconduct Procedures. The penalties under the procedures

can include a reduction in marks, failing a course or for the most serious matters (like plagiarism in an honours thesis or contract cheating) even suspension from the university. The Student Misconduct Procedures are available here:

www.gs.unsw.edu.au/policy/documents/studentmisconductprocedures.pdf

Submission of Assessment Tasks

Work submitted late without an approved extension by the course coordinator or delegated authority is subject to a late penalty of five percent (5%) of the maximum mark possible for that assessment item, per calendar day.

The late penalty is applied per calendar day (including weekends and public holidays) that the assessment is overdue. There is no pro-rata of the late penalty for submissions made part way through a day. This is for all assessments where a penalty applies.

Work submitted after five days (120 hours) will not be accepted and a mark of zero will be awarded for that assessment item.

For some assessment items, a late penalty may not be appropriate. These will be clearly indicated in the course outline, and such assessments will receive a mark of zero if not completed by the specified date. Examples include:

- Weekly online tests or laboratory work worth a small proportion of the subject mark;
- Exams, peer feedback and team evaluation surveys;
- Online quizzes where answers are released to students on completion;
- Professional assessment tasks, where the intention is to create an authentic assessment that has an absolute submission date; and,
- Pass/Fail assessment tasks.

Faculty-specific Information

[Engineering Student Support Services](#) – The Nucleus - enrolment, progression checks, clash requests, course issues or program-related queries

[Engineering Industrial Training](#) – Industrial training questions

[UNSW Study Abroad](#) – study abroad student enquiries (for inbound students)

[UNSW Exchange](#) – student exchange enquiries (for inbound students)

[UNSW Future Students](#) – potential student enquiries e.g. admissions, fees, programs, credit transfer

Phone

(+61 2) 9385 8500 – Nucleus Student Hub

(+61 2) 9385 7661 – Engineering Industrial Training

(+61 2) 9385 3179 – UNSW Study Abroad and UNSW Exchange (for inbound students)

School-specific Information

General Conduct and Behaviour

Consideration and respect for the needs of your fellow students and teaching staff is an expectation. Conduct which unduly disrupts or interferes with a class is not acceptable and students may be asked to leave the class.

Use of AI for assessments

Your work must be your own. If you use AI in the writing of your assessment, you must acknowledge this and your submission must be substantially your own work. More information can be found on this [website](#).

Workplace Health & Safety (WHS)

WHS for students and staff is of utmost priority. Most courses involve laboratory work. You must follow the [rules about conduct in the laboratory](#). About COVID-19, advice can be found on this [website](#).

School Contact Information

Consultations: Lecturer consultation times will be advised during the first lecture. You are welcome to email the tutor or laboratory demonstrator, who can answer your questions on this course and can also provide you with consultation times. ALL email enquiries should be made from your student email address with ELEC/TELExxxx in the subject line; otherwise they will not be answered.

Keeping Informed: Announcements may be made during classes, via email (to your student email address) and/or via online learning and teaching platforms – in this course, we will use Moodle <https://moodle.telt.unsw.edu.au/login/index.php>. Please note that you will be deemed to have received this information, so you should take careful note of all announcements.

Student Support Enquiries

[For enrolment and progression enquiries please contact Student Services](#)

Web

[Electrical Engineering Homepage](#)