



UNSW Course Outline

MMAN4400 Engineering Management - 2024

Published on the 10 Sep 2024

General Course Information

Course Code : MMAN4400

Year : 2024

Term : Term 3

Teaching Period : T3

Is a multi-term course? : No

Faculty : Faculty of Engineering

Academic Unit : School of Mechanical and Manufacturing Engineering

Delivery Mode : In Person

Delivery Format : Standard

Delivery Location : Kensington

Campus : Sydney

Study Level : Postgraduate, Undergraduate

Units of Credit : 6

Useful Links

[Handbook Class Timetable](#)

Course Details & Outcomes

Course Description

Engineering Management is designed to help you to learn how to manage the operations in organizations and also to build a business or commercial case for making engineering related decisions, such as investment in plant, equipment and processes. Although the main emphasis

will be on product and process, consideration will also be given to designing engineering services. The course offers a broad managerial perspective emphasizing the strategic impact of operations decisions and the interfaces between operations and the other functional areas of organizations, including of course, finance.

The course presents four subject areas, considered to be critical in terms of managing and leading engineering operations. They are:

- Issue analysis and decision making
- Investment analysis and engineering economy
- Costing and operations analysis
- Quality management, including design

Within each subject area the course will cover many conceptual and analytical techniques, all supporting fact- and data-based analysis and decision making with the aim of improved product and process performance, economy and sustainability.

Course Aims

Engineers have traditionally played an important role in management, largely because design and technology were the main key factors for success in product and process design, but also the fact that our engineering degree gave us outstanding analytical skills to solve a multitude of problems. This really hasn't changed, but in an increasingly complex world, successful organizations – public, private or governmental – need managers with increasingly broad and diverse skills, especially in finance, law, risk and quality management, and customer relations. And more to the point, organizations need leaders at every level, with the ability to make carefully considered and innovative long-term strategic decisions.

This course is designed to help you to learn how to manage the operations in organizations and to build a business or commercial case for making engineering related decisions, such as investment in plant, equipment and processes. Although the main emphasis will be on product and process, consideration will also be given to designing engineering services. The course offers a broad managerial perspective emphasizing the strategic impact of operations decisions and the interfaces between operations and the other functional areas of organizations, including of course, finance.

This course encompasses the key elements of operations management and investment analysis and pulls them together in a coherent format that allows you to understand the 'big picture' as well as the specific details. It is aimed at integrating the knowledge gained from the different

engineering subjects you have studied into a framework and process that allows you to implement your solutions and ideas in a commercial environment.

It is the purpose of MMAN4400 to equip you with enough knowledge and information to become a global manager, indeed a leader, with the ability to apply analytical methods and quality processes to create short and long-term value for your organization, your customers, and the community, in other words, all stakeholders.

Some of you will follow a 'traditional' engineering career, whereas others will branch out into very different fields, including consulting, banking, insurance, service industries, transport and so on. It is the aim of this course to prepare you for any of these and to train your mind to think strategically and systematically, integrating technical, commercial, financial and managerial concepts.

Course Learning Outcomes

Course Learning Outcomes
CLO1 : State what an organisation needs to do to remain competitive in today's environment
CLO2 : Perform investment and feasibility analyses
CLO3 : Determine whether a process is capable of producing a product or service to specifications
CLO4 : Describe and analyse the role that the operations management function plays in international business and how the operations function can play a strategic role in improving the global competitiveness of the organisation

Course Learning Outcomes	Assessment Item
CLO1 : State what an organisation needs to do to remain competitive in today's environment	<ul style="list-style-type: none">• Quizzes• Assignment Progress Evaluation• Group assignment
CLO2 : Perform investment and feasibility analyses	<ul style="list-style-type: none">• Quizzes• Assignment Progress Evaluation• Group assignment
CLO3 : Determine whether a process is capable of producing a product or service to specifications	<ul style="list-style-type: none">• Quizzes• Assignment Progress Evaluation• Group assignment
CLO4 : Describe and analyse the role that the operations management function plays in international business and how the operations function can play a strategic role in improving the global competitiveness of the organisation	<ul style="list-style-type: none">• Quizzes• Assignment Progress Evaluation• Group assignment

Learning and Teaching Technologies

Moodle - Learning Management System | Microsoft Teams

Assessments

Assessment Structure

Assessment Item	Weight	Relevant Dates
Quizzes Assessment Format: Individual	50%	Start Date: N/A Due Date: Week 4, 7, 10
Assignment Progress Evaluation Assessment Format: Group	10%	Start Date: Week 2 Lecture Due Date: Week 3-5 and 6-9 Tuesday 5PM
Group assignment Assessment Format: Individual	40%	Start Date: Week 9 Due Date: Week 10 Friday COB

Assessment Details

Quizzes

Assessment Overview

This is an INDIVIDUAL ASSESSMENT.

It consists of three (3) quizzes, where Quiz 1 and 3 are worth 15% and Quiz 2 is worth 20%. Quiz 1 and 3 are of 75 minutes duration and Quiz 2 is of 100 minutes duration. Quizzes are held online and contain a combination of multiple-choice questions and questions requiring calculations entered by the student. Feedback of each quiz is discussed in class during within the university's normal two-week turnaround period.

Course Learning Outcomes

- CL01 : State what an organisation needs to do to remain competitive in today's environment
- CL02 : Perform investment and feasibility analyses
- CL03 : Determine whether a process is capable of producing a product or service to specifications
- CL04 : Describe and analyse the role that the operations management function plays in international business and how the operations function can play a strategic role in improving the global competitiveness of the organisation

Detailed Assessment Description

The quizzes are invigilated assessments held in the School computer lab (Room 203 and 204). You will be informed in MS Teams which room to attend your assessment. Failure to complete the quiz in-person will result in zero mark for that quiz. You must use the computer in the

computer lab (i.e. you cannot use your own device for the quiz). You can only use Excel, Matlab and Minitab during the quiz. You cannot use lecture notes, lecture recording, internet search, generative AI tool and any form of online and offline communication during the quiz.

Assessment Length

60 minutes

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.

For more information on Generative AI and permitted use please see [here](#).

Assignment Progress Evaluation

Assessment Overview

This is a GROUP ASSIGNMENT. Each week, student teams submit their strategic choices and decisions and marks are awarded for relevance, consistency, coherence, and contingency. Each week students are expected to spend around 2 hours as a team analysing and discussing their strategies. Feedback is given to all teams at the time of the next lecture.

Assignment Overview: Start date: Each week from week 3-9 Assessment length: Fixed Submission consisting of selecting strategies and submitting electronically.

notes: Submit using the link provided in Moodle and make certain that the file name is unchanged from the Excel workbook provided to you. Due date: By Monday 5pm in that week Deadline for absolute fail: 5 minutes after the due time of 5pm in that week Marks returned: within two weeks of submission

The group project consists of a realistic engineering business case scenario, where students make decisions in relation to the main responsibilities that they will be exposed to as a manager of engineering projects and business streams. Decisions include product mix, manufacturing infrastructure, capital expenditure, operational improvements, human resources and training, health, safety, and environmental policies. Teams compete against a limited number of other

teams in a set of "worlds" that realistically mimic competitive behaviour amongst competing companies.

Teams are assessed on financial performance but also, and importantly on customer satisfaction, staff morale, health, and safety as well as sustainability. This is a group project, as it reflects common practice in industry. From weeks 3-9, all teams will submit their strategic decisions via a link provided on Moodle and directly on the provided Excel workbook, in relation to the case study.

Assessment Criteria: Marks will be awarded for submitting on time, with the correct file name (please do not ever change the file name). Additional marks will be given for strategies that are Coherent, Consistent and Contingent. In other words for strategic decisions that are well thought through and that reflect the state of the market in which the team participates. This assessment is marked out of 30 (but scaled to 10 for your final result). Years 1-4 attract a total of 4 marks per year and years 5 and 6 attract 7 marks each. If you fail to submit by the due date and time (+5minutes), you attract a loss of that year's total available marks. A name change for a submission in year 1 will result in losing 1 mark. A name change in subsequent years attracts a loss of 2.5 marks in that year. Please do not change the name of your file. If you submit in years 1-4 and no marks are deducted - you will be awarded the full marks for that year! In years 5 and 6, marks awarded will be based on company performance. If your company is ranked in the top 3 in your world, you will get the full 7 marks. Ranked 4-6, you will get 5 marks and ranked 1-3, the mark will be 3.5 (out of a total of 7).

Course Learning Outcomes

- CL01 : State what an organisation needs to do to remain competitive in today's environment
- CL02 : Perform investment and feasibility analyses
- CL03 : Determine whether a process is capable of producing a product or service to specifications
- CL04 : Describe and analyse the role that the operations management function plays in international business and how the operations function can play a strategic role in improving the global competitiveness of the organisation

Detailed Assessment Description

The weighting and description of this assessment is updated as below:

Assessment Weighting: From 10% to 15%

Each week from week 3-9 (excluding week 6), each team is to complete their strategy using the assigned Excel file and submitting it electronically on Moodle. Make certain that the file name is

unchanged from the Excel workbook provided to you. Due date: By Monday 3pm in that week, except Week 5, the submission is due on Tuesday at 3pm and Week 6 has no submission. The maximum mark each team can score per week is five (5)

Late submission and/or changing the 'name' of the submission file will attract the following penalty:

Week 3

- File name change - Penalty 1 mark
- Late submission within 4 hours - Penalty 1.5 marks
- Late submission after 4 hours or no submission - Penalty 5 marks

Week 4-9 (excluding Week 6):

- File name change - Penalty 2.5 marks
- Late submission within 4 hours - Penalty 1.5 marks
- Late submission after 4 hours or no submission - Penalty 5 marks

*Each team receives a 'one-off max. 2 hours late allowance'. It means your team can submit your file late up to 2 hours ONCE without attracting late penalty.

Assessment Length

Approximately 2 hours per week

Submission notes

One submission per team

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

No Assistance

This assessment is designed for you to complete without the use of any generative AI. You are not permitted to use any generative AI tools, software or service to search for or generate information or answers.

For more information on Generative AI and permitted use please see [here](#).

Group assignment

Assessment Overview

This is both a GROUP (50%) and INDIVIDUAL (50%) assessment. The group assignment has a limit of 3000 words per team and the individual assignment a limit of 800 words per student.

Assignment Overview: The group project consists of a realistic engineering business case scenario, where students make decisions in relation to the main responsibilities that they will be exposed to as a manager of engineering projects and business streams. Decisions include product mix, manufacturing infrastructure, capital expenditure, operational improvements, human resources and training, health, safety and environmental policies. Teams compete against a limited number of other teams in a set of "worlds" that realistically mimic competitive behaviour amongst competing companies. Teams are assessed on financial performance but also, and importantly on customer satisfaction, staff morale, health and safety as well as sustainability.

The final report will be written as a 'hand-over' report to the new and incoming management team. It will focus on a description of the market, the nature of the business, what has worked well in terms of your strategies and what has not worked well. What were the key drivers in your market. What would you have done differently. Each team member needs to write their own reflection as part of this report, describe their own approach to the strategies and decisions made and what they would do differently. This assignment is submitted through Turnitin and students do not see Turnitin similarity reports.

Assessment Criteria: The final submission consists of two parts: A group report and an individual report. Both contribute 50% to this assessment. The marking rubric for each report is given below.

Group Report:

ITEM

MARKS

COMMENTS

Describe your overall business strategy

5

Here the overall business strategy is explained in terms of strategic direction, quality drivers, capacity strategies, design strategies, business strategies

Describe each product strategy

12

There are 4 products and each product strategy contributes 3 marks

Referring to market segments, explain your pricing for each product line

6

There are 4 product lines and each contributes 1.5 marks

Writing style and grammar

2

Total

25

Individual Report:

ITEM

MARKS

COMMENTS

Describe your role in the team

5

A detailed insight into what each team member contributed in terms of analysis, developing solutions, working in a team

Identify what worked/what didn't from your perspective

4

What would you do differently in terms of preparing for a meeting, analysing data, communicating within the team, reaching consensus, making decisions etc

Describe the teams view on Quality - do you agree?

3

Quality is a key driver and applies to all functions within the business.

Handover Issues - what is your advice to the incoming team

3

The incoming management team needs to know exactly where to focus on – immediate success but also longer term fixing of problems and strategic weaknesses

Conflict mechanism

3

How was conflict resolved within the team

Learnings and Pivots

5

A deep reflection of the decisions made and strategies implemented and what effect they had on the performance of the team and what was learnt as a result. What mistakes would one not make again.

Writing Style and Grammar

2

Total

25

Course Learning Outcomes

- CL01 : State what an organisation needs to do to remain competitive in today's environment
- CL02 : Perform investment and feasibility analyses
- CL03 : Determine whether a process is capable of producing a product or service to specifications
- CL04 : Describe and analyse the role that the operations management function plays in international business and how the operations function can play a strategic role in improving the global competitiveness of the organisation

Detailed Assessment Description

The weighting and description of this assessment is updated as below:

Group Report (Group Assessment 15%)

The group project consists of a realistic engineering business case scenario, where students make decisions in relation to the main responsibilities that they will be exposed to as a manager of engineering projects and business streams. Decisions include product mix, manufacturing infrastructure, capital expenditure, operational improvements, human resources and training, health, safety and environmental policies. Teams compete against a limited number of other teams in a set of "worlds" that realistically mimic competitive behaviour amongst competing companies. Teams are assessed on financial performance but also, and importantly on customer satisfaction, staff morale, health and safety as well as sustainability.

The final report will be written as a 'hand-over' report to the new and incoming management team. It will focus on a description of the market, the nature of the business, what has worked well in terms of your strategies and what has not worked well. What were the key drivers in your market. What would you have done differently. Your team should aim for 2000 words per team for this report. A detailed marking rubric will be provided in the course outline.

Individual Reflection (20%)

Each team member needs to write their own reflection as part of this report, describe their own approach to the strategies and decisions made and what they would do differently. You should aim for 1000 words for this assessment.

Assessment Length

2000 words

Submission notes

One submission per team

Assignment submission Turnitin type

Not Applicable

Generative AI Permission Level

Simple Editing Assistance

In completing this assessment, you are permitted to use standard editing and referencing functions in the software you use to complete your assessment. These functions are described below. You must not use any functions that generate or paraphrase passages of text or other media, whether based on your own work or not.

If your Convenor has concerns that your submission contains passages of AI-generated text or media, you may be asked to account for your work. If you are unable to satisfactorily demonstrate your understanding of your submission you may be referred to UNSW Conduct & Integrity Office for investigation for academic misconduct and possible penalties.

For more information on Generative AI and permitted use please see [here](#).

General Assessment Information

Grading Basis

Standard

Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 9 September - 15 September	Lecture	<ul style="list-style-type: none">• Course overview• Engineering economy part 1
	Activity	<ul style="list-style-type: none">• Team forming• Introduction to the major assignment
Week 2 : 16 September - 22 September	Lecture	<ul style="list-style-type: none">• Accounting 101• Cost of capital• Value engineering
	Activity	Introducing the Simulation Tool for the major assignment
Week 3 : 23 September - 29 September	Lecture	<ul style="list-style-type: none">• Engineering economy part 2• Quiz 1 revision
	Assessment	• Year 1 decision submission - Remember DO NOT CHANGE THE EXCEL FILE NAME!
Week 4 : 30 September - 6 October	Lecture	• Engineering economy part 3
	Assessment	<ul style="list-style-type: none">• Year 2 decision submission - Remember DO NOT CHANGE THE EXCEL FILE NAME!• Quiz 1 - content covering Week 1 to 3 inclusive
Week 5 : 7 October - 13 October	Lecture	<ul style="list-style-type: none">• Theory of quality• Tool of quality• Acceptance sampling
	Assessment	• Year 3 decision submission - Remember DO NOT CHANGE THE EXCEL FILE NAME!
Week 6 : 14 October - 20 October	Tutorial	<ul style="list-style-type: none">• Class will be held at usual time• Quiz 2 revision• Major assignment support and Q&A
Week 7 : 21 October - 27 October	Lecture	<ul style="list-style-type: none">• Statistical process control• Variable and attribute control charts
	Assessment	<ul style="list-style-type: none">• Year 4 decision submission - Remember DO NOT CHANGE THE EXCEL FILE NAME!• Quiz 2 - content covering Engineering Economy, Tools of quality and acceptance sampling
Week 8 : 28 October - 3 November	Lecture	• Process analysis part 1
	Assessment	• Year 5 decision submission - Remember DO NOT CHANGE THE EXCEL FILE NAME!
Week 9 : 4 November - 10 November	Lecture	<ul style="list-style-type: none">• Process analysis part 2• Quiz 3 revision• Final report and individual reflection discussion
	Assessment	• Year 6 decision submission - Remember DO NOT CHANGE THE EXCEL FILE NAME!
Week 10 : 11 November - 17 November	Lecture	<ul style="list-style-type: none">• Warp-up session• Class discussion
	Assessment	<ul style="list-style-type: none">• Quiz 3 - content covering Week 7 to 9 inclusive• Final report and individual reflect due Friday COB

Attendance Requirements

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

Course Resources

Course Evaluation and Development

The business simulation as the course major assignment has proven largely successful in the past. We will continue to improve on the business simulation to ensure this engaging

assessment task can be delivered efficiently at scale.

Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Ronald Ting Tai Chan		ME 507	Contact vs MS Teams	Contact vs MS Teams	Yes	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 convener 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

Short Extensions

Short extensions are not currently applicable to Mechanical and Manufacturing Engineering Courses.

Review of Results

If you believe that there has been a marking error, you can request a review of results. Review of results cannot be used to get feedback.

If you would like feedback for assessments, you are welcome to contact the course convenor directly.

Use of AI

The use of AI is prohibited unless explicitly permitted by the course convenor. Please respect this and be aware that penalties will apply when unauthorised use is detected, such as through Turnitin. If the use of generative AI, such as ChatGPT, is allowed in a specific assessment, they must be properly credited, and your submissions must be substantially your own work.

Final Exam in Exam Period

For courses with a centrally timetabled final exam, students must be available for the entire exam period from Mon-Sat until your exact exam date is confirmed.

School Contact Information

Location

UNSW Mechanical and Manufacturing Engineering

Ainsworth building J17, Level 1

Above Coffee on Campus

Hours

9:00–5:00pm, Monday–Friday*

*Closed on public holidays, School scheduled events and University Shutdown

Web

[School of Mechanical and Manufacturing Engineering](#)

[Engineering Student Support Services](#)

[Engineering Industrial Training](#)

[UNSW Study Abroad and Exchange](#) (for inbound students)

[UNSW Future Students](#)

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)

(+61 2) 9385 4097 – School Office**

**Please note that the School Office will not know when/if your course convenor is on campus or available

Email

[Engineering Student Support Services](#) – current student enquiries

- e.g. enrolment, progression, 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

[School Office](#) – School general office administration enquiries

- NB: the relevant teams listed above must be contacted for all student enquiries. The School will only be able to refer students on to the relevant team if contacted

Important Links

- [Student Wellbeing](#)
- [Urgent Mental Health & Support](#)
- [Equitable Learning Services](#)
- [Faculty Transitional Arrangements for COVID-19](#)
- [Moodle](#)
- [Lab Access](#)
- [Computing Facilities](#)
- [Student Resources](#)
- [Course Outlines](#)
- [Makerspace](#)
- [UNSW Timetable](#)
- [UNSW Handbook](#)