



**UNSW**

## UNSW Course Outline

# FOOD8801 Unit Operations in Food Processing - 2024

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## General Course Information

**Course Code :** FOOD8801

**Year :** 2024

**Term :** Term 2

**Teaching Period :** T2

**Is a multi-term course? :** No

**Faculty :** Faculty of Engineering

**Academic Unit :** School of Chemical Engineering

**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

Food processing is the transformation of raw ingredients into food products that are safe to eat, provide nutrition, dietary variety and convenience with extended shelf life. This course will give

you a foundational understanding of the processes we use to transform food (also known as ‘unit operations’). Even though their sequences may change from product to product and plant to plant, they are all governed by the same basic principles. Principles such as the conservation of momentum, mass and energy, heat and mass transfer, and thermodynamics, that you have mastered in earlier courses.

This course introduces some of the more important unit operations in the food industry such as refrigeration, evaporation, dehydration, packaging, extrusion, and physical separations. You will learn to describe the processes, their applications and effects on food products using appropriate process diagrams, and to analyse them using mass and heat balances.

Finally, having completed this course, you will be able to rapidly understand other unit operations not taught in this course, since they are all based on the same fundamental principles. The skills you develop will enable you to understand, manage, optimize, and improve actual industrial food manufacturing processes.

## Course Aims

This aims to teach students some of the main unit operations used in the food processing industry, by describing and then applying basic science and engineering principles to each major processing step. For each unit operation, students should become familiar with:

- Scientific and engineering principles,
- Effects on food materials,
- Solving engineering problems related to each unit operation, and
- The equipment used.

# Course Learning Outcomes

Course Learning Outcomes
CLO1 : Explain and apply principles of heat and mass transfer to specific unit operations used in the food industry.
CLO2 : Apply basic scientific and engineering principles underpinning unit operations.
CLO3 : Set up and solve problems (including simple design) for each unit operation.
CLO4 : Sketch typical examples of equipment used for each unit operation.
CLO5 : Describe the specific nature and requirements of packaging as used in the food industry.

Course Learning Outcomes	Assessment Item
CLO1 : Explain and apply principles of heat and mass transfer to specific unit operations used in the food industry.	<ul style="list-style-type: none"><li>• Lab reports</li><li>• Assignments</li><li>• Final exam</li></ul>
CLO2 : Apply basic scientific and engineering principles underpinning unit operations.	<ul style="list-style-type: none"><li>• Lab reports</li><li>• Assignments</li><li>• Final exam</li></ul>
CLO3 : Set up and solve problems (including simple design) for each unit operation.	<ul style="list-style-type: none"><li>• Assignments</li><li>• Final exam</li></ul>
CLO4 : Sketch typical examples of equipment used for each unit operation.	<ul style="list-style-type: none"><li>• Assignments</li><li>• Final exam</li></ul>
CLO5 : Describe the specific nature and requirements of packaging as used in the food industry.	<ul style="list-style-type: none"><li>• Lab reports</li><li>• Assignments</li><li>• Final exam</li></ul>

## Learning and Teaching Technologies

Moodle - Learning Management System

## Other Professional Outcomes

This course is part of UNSW Food Science specializations approved (2021-2026) by the Institute of Food Technologists Higher Education Review Board (IFT HERB).

## Additional Course Information

The course is organised into 6 hours of contact per week over a 10-week trimester. Weeks 1-2, 4-5, 8 and 10 will have three 2-hour lectures, while weeks 3, 7 and 9 will have a 3-hour lab session, a 2-hour lecture and 1-hour lecture. Tutorials for problem solving practice will be

incorporated within the lectures. Course materials will be provided through the Moodle course page.

You should not be doing this course unless:

You have done the pre-requisite courses of either FOOD3060 (Food Processing Principles) or CEIC2001 (Fluid and Particle Mechanics) and CEIC2002 (Heat and Mass Transfer) or You have done equivalent courses covering heat transfer, mass and energy balances and fluid flow, or You have an adequate background in heat transfer, mass and energy balances, and fluid flow.

The reason for this is because those principles are assumed knowledge for this course. A student who has not completed the pre-requisite courses or an equivalent course may be challenged by the content.

# Assessments

## Assessment Structure

Assessment Item	Weight	Relevant Dates
Lab reports Assessment Format: Group	15%	Start Date: Not Applicable Due Date: Week 4, Week 8, Week 10
Assignments Assessment Format: Group	45%	Start Date: Not Applicable Due Date: Week 4, Week 5, Week 7, Week 8, Week 9, Week 10
Final exam Assessment Format: Individual	40%	Start Date: Not Applicable Due Date: Exam Period

## Assessment Details

### Lab reports

#### Assessment Overview

Students work in groups to complete experiments on refrigeration, packaging, and dehydration and then write a report to demonstrate their understanding of the lab goals, methods, results, and analysis. Students will receive feedback online.

#### Course Learning Outcomes

- CLO1 : Explain and apply principles of heat and mass transfer to specific unit operations used in the food industry.
- CLO2 : Apply basic scientific and engineering principles underpinning unit operations.
- CLO5 : Describe the specific nature and requirements of packaging as used in the food

industry.

#### Assignment submission Turnitin type

Not Applicable

## Assignments

#### Assessment Overview

Students will complete three problem-solving assignments to consolidate their learning about refrigeration, evaporation, dehydration, and packaging. Each assignment will consist of multiple phases: an individual submission of the assignment (5% each), working with a peer prepare a revised assignment submission (7% each), and assessment of the peer's quality of feedback and engagement (3% each).

In addition to the peer feedback, students will receive feedback via an online quiz in the individual submission and online after the revised peer submission.

#### Course Learning Outcomes

- CLO1 : Explain and apply principles of heat and mass transfer to specific unit operations used in the food industry.
- CLO2 : Apply basic scientific and engineering principles underpinning unit operations.
- CLO3 : Set up and solve problems (including simple design) for each unit operation.
- CLO4 : Sketch typical examples of equipment used for each unit operation.
- CLO5 : Describe the specific nature and requirements of packaging as used in the food industry.

#### Assignment submission Turnitin type

Not Applicable

## Final exam

#### Assessment Overview

Summative assessment course learning outcomes. The final exam will test student understanding of both the technology and their problem-solving skills related to the unit operations covered in the course.

#### Course Learning Outcomes

- CLO1 : Explain and apply principles of heat and mass transfer to specific unit operations used in the food industry.
- CLO2 : Apply basic scientific and engineering principles underpinning unit operations.
- CLO3 : Set up and solve problems (including simple design) for each unit operation.
- CLO4 : Sketch typical examples of equipment used for each unit operation.

- CLO5 : Describe the specific nature and requirements of packaging as used in the food industry.

## General Assessment Information

### Grading Basis

Standard

# Course Schedule

Teaching Week/Module	Activity Type	Content
Week 1 : 27 May - 2 June	Lecture	This week has lectures on refrigeration: Tuesday: Introduction to unit operations & refrigeration (Lecturer: Francisco Trujillo/Yong Wang) Wednesday: Refrigeration (Lecturer: Francisco Trujillo) Friday: Refrigeration (Lecturer: Francisco Trujillo)
Week 2 : 3 June - 9 June	Lecture	This week has lectures on refrigeration and evaporation: Tuesday: Refrigeration (Lecturer: Francisco Trujillo) Wednesday: Refrigeration (Lecturer: Francisco Trujillo) Friday: Refrigeration/evaporation (Lecturer: Francisco Trujillo)
Week 3 : 10 June - 16 June	Lecture	This week has lectures-tutorials on evaporation: Tuesday: Evaporation (Lecturer: Francisco Trujillo) Wednesday: Evaporation (Lecturer: Francisco Trujillo)
	Laboratory	This week has a 3 hour lab session on refrigeration on Friday from 2pm to 5pm at Science & Engineering building (SEB) 123 (K-E8-123).
Week 4 : 17 June - 23 June	Lecture	This week has the following lectures on evaporation and dehydration: Tuesday: Evaporation (Lecturer: Francisco Trujillo) Wednesday: Evaporation (Lecturer: Francisco Trujillo) Friday: Dehydration (Lecturer: Yong Wang)
	Assessment	This week has the following assessments: Lab report 1 - Refrigeration: due date on Wednesday at 7 pm. Assignment 1 - Individual submission: due date on Friday at 7 pm.
Week 5 : 24 June - 30 June	Lecture	This week has the following lectures on dehydration: Tuesday: Dehydration (Lecturer: Yong Wang) Wednesday: Dehydration (Lecturer: Yong Wang) Friday: Dehydration (Lecturer: Yong Wang)
	Assessment	This week has the following assessments: Assignment 1 – Team submission & Peer assessment: due date on Friday at 7 pm.
Week 7 : 8 July - 14 July	Lecture	This week has the following lectures on dehydration & packaging: Tuesday: Dehydration & packaging (Lecturer: Yong Wang) Wednesday: Packaging (Lecturer: Yong Wang)
	Laboratory	This week has a 3 hour lab session on dehydration on Friday from 2pm to 5pm at Science & Engineering building (SEB) 123 (K-E8-123).
	Assessment	This week has the following assessments: Assignment 2 - Individual submission: due date on Friday at 7 pm.
Week 8 : 15 July - 21 July	Lecture	This week has the following lectures-tutorials on packaging: Tuesday: Packaging (Lecturer: Yong Wang) Wednesday: Packaging (Lecturer: Yong Wang) Friday: Packaging (Lecturer: Yong Wang)
	Assessment	This week has the following assessments: Lab report 2 - Dehydration: due date on Wednesday at 7 pm. Assignment 2 - Team submission & Peer assessment: due date on Friday at 7 pm.
Week 9 : 22 July - 28 July	Lecture	This week has the following lectures-tutorials on packaging and extrusion: Tuesday: Packaging/Extrusion (Lecturer: Yong Wang /Francisco Trujillo) Wednesday: Extrusion (Lecturer: Francisco Trujillo)
	Laboratory	This week has a 3 hour lab session on packaging on Friday from 2pm to 5pm at Science & Engineering building (SEB) 123 (K-E8-123).
	Assessment	This week has the following assessments: Assignment 3 - Individual submission: due date on Friday at 7 pm.
Week 10 : 29 July - 4 August	Lecture	This week has the following lectures on extrusion and physical separations: Tuesday: Extrusion (Lecturer: Francisco Trujillo) Wednesday: Physical separations (Lecturer: Francisco Trujillo) Friday: Physical separations (Lecturer: Francisco Trujillo)
	Assessment	This week has the following assessments: Lab report 3 - Packaging: due date on Wednesday at 7 pm. Assignment 3 - Team submission & Peer assessment: due date on Friday at 7 pm.

# Attendance Requirements

Students must attend the three labs of the course scheduled on Fridays of weeks 3, 7 and 9.

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

# Course Resources

## Prescribed Resources

Textbooks:

- Singh, R.P. and Heldman, D.R., 2013. Introduction to Food Engineering, Enhanced. Academic Press. <https://www.sciencedirect.com/science/article/pii/B9780123985309000218>
- Fellows, P.J., 2009. Food processing technology: principles and practice. Elsevier. <https://www.sciencedirect.com/book/9781845692162/food-processing-technology>

## Recommended Resources

Other Recommended Textbooks:

- Toledo, R.T., Singh, R.K. and Kong, F., 2007. Fundamentals of food process engineering (Vol. 297). New York: Springer. <https://ebookcentral.proquest.com/lib/unsw/detail.action?docID=323605>
- Varzakas, T. and Tzia, C. eds., 2014. Food Engineering Handbook, Two Volume Set (Vol. 31). CRC Press. <https://ebookcentral.proquest.com/lib/unsw/detail.action?docID=1731942>
- Berk, Z., 2018. Food process engineering and technology. Academic press. Second edition available online via the UNSW library: <https://www.sciencedirect.com/book/9780124159235/food-process-engineering-and-technology>
- Clark, S., Jung, S. and Lamsal, B. eds., 2014. Food processing: principles and applications. John Wiley & Sons. <https://ebookcentral.proquest.com/lib/unsw/detail.action?docID=1662196>
- Earle, R.L., 2013. Unit operations in food processing. Elsevier. <https://www.sciencedirect.com/book/9780080255361/unit-operations-in-food-processing> <https://nzifst.org.nz/resources/unitoperations/index.htm>
- Heldman, D.R., 2011. Food preservation process design. Academic Press. <https://www.sciencedirect.com/book/9780123724861/food-preservation-process-design>

Refrigeration:

- Cleland, Andrew C., 1990. Food Refrigeration Processes: Analysis, Design, and Simulation. Elsevier.

Packaging:

- Robertson, G.L., 1998. Food packaging. Marcel Dekker.

## Extrusion and Scale-Up:

- Sharma, S., Mulvaney, S.H. and Rizvi, S.S., 2000. Food process engineering: theory and laboratory experiments

## Course Evaluation and Development

Student feedback is extremely valuable, and you are expected to provide feedback on the course. A Moodle tool has been created on the course web page which will become visible late in the session and allow you to evaluate the course.

## Staff Details

Position	Name	Email	Location	Phone	Availability	Equitable Learning Services Contact	Primary Contact
Convenor	Francisco Trujillo		Room 420, Hilmer building (Enter via the Science and Engineering Building SEB E8)	+61 2 9385 5648	Wednesday 1pm to 2pm, Weeks 1 to 10, except Week 6	No	Yes
Lecturer	Yong Wang		Room 218, Hilmer building (Enter via the Science and Engineering Building SEB E8)		Tuesday 16:00-17:00 Weeks 5-9	No	No
Lab staff	Richard Li			+61 2 9385 7508		No	No

## 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 polices. 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](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](http://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](http://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

### Course Workload

Course workload is calculated using the Units-Of-Credit (UOC). The normal workload expectation for one UOC is approximately 25 hours per term. This includes class contact hours, private study, other learning activities, preparation and time spent on all assessable work.

Most coursework courses at UNSW are 6 UOC and involve an estimated 150 hours to complete, for both regular and intensive terms. Each course includes a prescribed number of hours per week (h/w) of scheduled face-to-face and/or online contact. Any additional time beyond the prescribed contact hours should be spent in making sure that you understand the lecture material, completing the set assignments, further reading, and revising for any examinations.

Most 6 UoC courses will involve approximately 10-12 hours per week of work on your part. If you're not sure what to do in these hours of independent study, the resources on the [UNSW Academic Skills](#) pages offer some suggestions including: making summaries of lectures, read/summarise sections from the textbook, attempt workshop problems, reattempting workshop problems with some hints from the solutions, looking for additional problems in the textbook.

Full-time enrolment at university means that it is a *full-time* occupation for you and so you would typically need to devote 35 hours per week to your studies to succeed. Full-time enrolment at university is definitely incompatible with full-time employment. Part-time/casual employment can certainly fit into your study schedule but you will have to carefully balance your study obligations with that work and decide how much time for leisure, family, and sleep you want left after fulfilling your commitments to study and work. Everyone only gets 168 hours per week; overloading yourself with both study commitments and work commitments leads to poor outcomes and dissatisfaction with both, overtiredness, mental health issues, and general poor quality of life.

### On-campus Class Attendance

Most classes at UNSW are "In Person" and run in a face-to-face mode only. Attendance and participation in the classes is expected. As an evidence-driven engineer or scientist, you'll be interested to know that education research has shown students learn more effectively when they come to class, and less effectively from lecture catch-up recordings. If you have to miss a class due to illness, for example, we expect you to catch up in your time, and within the coming couple of days.

For most courses that are running in an "in person" mode:

- Lectures are normally recorded to provide an opportunity to review material after the lecture; lecture recordings are not a substitute for attending and engaging with the live class.
- Workshops/tutorials are not normally recorded as the activities that are run within those sessions normally cannot be captured by a recording. These activities may also include assessable activities in some or all weeks of the term.
- Laboratories are not recorded and require in-person attendance. Missing laboratory sessions may require you to do a make-up session later in the term; if you miss too many laboratory sessions, it may be necessary to seek a Permitted Withdrawal from the course and reattempt it next year, or end up with an Unsatisfactory Fail for the course.
- Assessments will often require in-person attendance in a timetabled class or a scheduled examination.

### Submission of Assessment Tasks

In the School of Chemical Engineering, all written work will be submitted for assessment via Moodle unless otherwise specified. Attaching cover sheets to uploaded work is *not* required unless specifically requested for an individual assessment task; when you submit work through Moodle for assessment you are agreeing to uphold the Student Code.

Some assessments will require you to complete the work online and it may be difficult for the course coordinator to intervene in the system after the due date. You should ensure that you are familiar with assessment systems well before the due date. If you do this, you will have time to get assistance before the assessment closes.

All submissions are expected to be neat and clearly set out. Your results are the pinnacle of all your hard work and should be treated with respect. Presenting results clearly gives the marker the best chance of understanding your method; even if the numerical results are incorrect. Please make it easy for the markers who are looking at your work to see your achievement and give you due credit.

Marking guidelines for assignment submissions will be provided at the same time as assignment details to assist with meeting assessable requirements. Submissions will be marked according to the marking guidelines provided.

## Academic Integrity

**Academic integrity** is fundamental to success at university. Academic integrity can be defined as a commitment to six fundamental values in academic pursuits: honesty, trust, fairness, respect, responsibility and courage (International Center for Academic Integrity, 'The Fundamental Values of Academic Integrity', T. Fishman (ed), Clemson University, 2013). At UNSW, this means that your work must be your own, and others' ideas should be appropriately acknowledged. If you don't follow these rules, plagiarism may be detected in your work.

Further information about academic integrity and plagiarism can be located at:

- The [Current Students site](#)
- The [ELISE training site](#)

The Conduct and Integrity Unit provides further resources to assist you to understand your conduct obligations as a student: <https://student.unsw.edu.au/conduct>.

To help describe what we are looking for, here are some things that we consider to be quite acceptable (even desirable!) actions for many assessments, and some that we consider to be

unacceptable in most circumstances. Please check with the instructions for your assessments and your course coordinator if you're unsure. As a rule of thumb, if you don't think you could look the lecturer in the eye and say "this is my own work", then it's not acceptable.

### Acceptable actions

- ☒ reading/searching through material we have given you, including lecture slides, course notes, sample problems, workshop problem solutions
- ☒ reading/searching lecture transcripts
- ☒ reading/searching resources that we have pointed you to as part of this course, including textbooks, journal articles, websites
- ☒ reading/searching through your own notes for this course
- ☒ all of the above, for any previous courses
- ☒ using spell checkers, grammar checkers etc to improve the quality of your writing
- ☒ studying course material with other students

### Unacceptable actions

- ☒ asking for help completing an assessment from other students, friends, family
- ☒ asking for help on Q&A or homework help websites
- ☒ searching for answers to the specific assessment questions online or in shared documents
- ☒ copying material from any source into your answers
- ☒ using generative AI tools to complete or substantially complete an assessment for you
- ☒ paying someone else to do the assessment for you

**Referencing** is a way of acknowledging the sources of information that you use to research your assignments. You need to provide a reference whenever you draw on someone else's words, ideas or research. Not referencing other people's work can constitute plagiarism. Further information about referencing styles can be located at <https://student.unsw.edu.au/referencing>.

For assessments in the School of Chemical Engineering, we recommend the use of referencing software such as [Mendeley](#) or [EndNote](#) for managing references and citations. Unless required otherwise specified (i.e. in the assignment instructions) students in the School of Chemical Engineering should use either the APA 7th edition, or the American Chemical Society (ACS) referencing style as canonical author-date and numbered styles respectively.

**Artificial intelligence tools** such as ChatGPT, CodePilot, and built-in tools within Word are modern tools that are useful in some circumstances. In your degree at UNSW, we're teaching you skills that are needed for your professional life, which will include how to use AI tools responsibly plus lots of things that AI tools cannot do for you. AI tools already are (or will soon be) part of professional practice for all of us. However, if we were only teaching you things that AI could do, your degree would be worthless, and you wouldn't have a job in 5 years.

Whether the use of AI tools in an assessment is appropriate will depend on the goals of that assessment. As ever, you should discuss this with your lecturers – there will certainly be assessments where the use of AI tools is encouraged, as well as others where it would interfere with your learning and place you at a disadvantage later. Our goal is to help you learn how to ethically and professionally use the tools available to you. To learn more about the use of AI, [see this discussion we have written](#) where we analyse the strengths and weaknesses of generative AI tools and discuss when it is professionally and ethically appropriate to use them.

While AI may might provide useful tools to help with some assessments, UNSW's policy is quite clear that taking the output of generative AI and submitting it as your own work will never be appropriate, just as paying someone else to complete an assessment for you is serious misconduct.

## Asking Questions

Asking questions is an important part of learning. Learning to ask good questions and building the confidence to do so in front of others is an important professional skill that you need to develop. The best place to ask questions is during the scheduled classes for this course, with the obvious exception being questions that are private in nature such as special consideration or equitable learning plans. Between classes, you might also think of questions – some of those you might save up for the next class (write them down!), and some of them you might ask in a Q&A channel on Teams or a Q&A forum on Moodle. Please understand that staff won't be able to answer questions on Teams/Moodle immediately but will endeavour to do so during their regular working hours (i.e. probably not at midnight!) and when they are next working on this particular

course (i.e. it might be a day or two). Please respect that staff are juggling multiple work responsibilities (teaching more than one course, supervising research students, doing experiments, writing grants, ...) and also need to have balance between work and the rest of their life.

## School Contact Information

For assistance with enrolment, class registration, progression checks and other administrative matters, please see [the Nucleus: Student Hub](#). They are located inside the Library – first right as you enter the main library entrance. You can also contact them via <http://unsw.to/webforms> or reserve a place in the face-to-face queue using the UniVerse app.

For course administration matters, please contact the Course Coordinator.

Questions about this course should normally be asked during the scheduled class so that everyone can benefit from the answer and discussion.