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## 1. Staff contact details

### Contact details and consultation times for course convenor

Name: Dr Shaun Chan

Office location: Room 402D, Building J17

Email: [ging.chan@unsw.edu.au](mailto:ging.chan@unsw.edu.au)

Research: <https://research.unsw.edu.au/projects/advanced-combustion-diagnostics-laboratory>

For questions regarding demonstration/example problems, the demonstrators in your demonstration will be the first contact. Administrative enquiries that are personal and confidential in respect of an individual student can be made to the course convenor (Dr Shaun Chan), if the circumstances require it.

### Head demonstrator (contact for online assignment and laboratory etc.)

Name: Mr Paul Yip (Online assignment)

Email: [h.i.yip@unsw.edu.au](mailto:h.i.yip@unsw.edu.au)

Name: Mr Mark Zhai (Lab)

Email: [g.zhai@unsw.edu.au](mailto:g.zhai@unsw.edu.au)

### Contact details and consultation times for additional lecturers/demonstrators/lab staff

Please see the course [Moodle](#).

## 2. Important links

[Moodle](#)

[Lab Access](#)

[Computing Facilities](#)

[Student Resources](#)

[Course Outlines](#)

[Engineering Student Support Services Centre](#)

[Makerspace](#)

[UNSW Timetable](#)

[UNSW Handbook](#)

[UNSW Mechanical and Manufacturing Engineering](#)

## 3. Course details

### Credit points

This is a 6 unit-of-credit (UoC) course and involves ~13 hours per week (h/w) of face-to-face contact.

The normal workload expectations of a student are approximately 25 hours per term for each UOC, including class contact hours, other learning activities, preparation and time spent on all assessable work.

You should aim to spend about 30 h/w on this course. The additional time should be spent in making sure that you understand the lecture material, completing the set assignments, further reading, and revising for any examinations.

### Contact hours

The class contact will include the following sessions:

	<b>Day</b>	<b>Time</b>	<b>Location</b>
<b>Lectures</b>	Monday (Week 1-4)	1000-1200 1300-1400	Tyree Energy Technology LG05 (K-H6-LG05)
	Tuesday (Week 1,2 & 4)	1000-1200 1300-1400	Tyree Energy Technology LG05 (K-H6-LG05)
	Wednesday (Week 1,2 & 4)	1000-1200 1300-1400	Tyree Energy Technology LG05 (K-H6-LG05)
<b>In-class consultation</b>	Tuesday (Week 3)	1000-1200	Tyree Energy Technology LG05 (K-H6-LG05)
<b>Mid-session test</b>	Wednesday (Week 3)	1000-1100	Tyree Energy Technology LG05 (K-H6-LG05)
<b>Demonstrations</b>	Friday	1300-1500	Electrical Engineering G09 (K-G17-G09) Electrical Engineering G10 (K-G17-G10)
<b>Lab</b>	Refer to Section 5, Course outline	Refer to Section 5, Course outline	Willis Annexe UG Lab (K-J18-214A108)

class timetable for the demonstration sessions that you are enrolled in, and attend only that session. Selected problems from the online assignments will be discussed during the demonstration session. You are encouraged to look over and attempt the problems before entering the demonstration.

### *Laboratory periods*

You will have 3 compulsory two-hour laboratories to attend, commencing in Week 2. At the time of enrolment, you selected one of the 4 possible laboratory timeslots. Please refer to your class timetable for the laboratory you are enrolled in, and attend only that session.





## Laboratory schedule

Willis Annex UG Laboratory (K-J18-214A)

### *Laboratory time slots*

H09A	Thurs	0900 . 1100	Willis Annexe UG Lab
H11A	Thurs	1100 . 1300	Willis Annexe UG Lab
H13A	Thurs	1300 . 1500	Willis Annexe UG Lab
H15A	Thurs	1500 . 1700	Willis Annexe UG Lab

Due to the number of students, there will be 4 possible lab timeslots for each lab topic. The laboratory timeslots that





## Assignments



## Marking

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.

## Examinations

There will be 1 two-hour examination at the end of the session for everything learned from this course.

You must be available for all tests and examinations. Final examinations for each course are held during the University examination periods: February for Summer Term, May for T1, August for T2, and November/December for T3.

Please visit myUNSW for Provisional Examination timetable publish dates.

For further information on exams, please see the [Exams](#) webpage.

## Mid-session test

There will be 1 one-hour mid-session test (held in Week 3). For this test, you will be tested with questions from Weeks 1~2 lectures.

## Calculators

You will need to provide your own calculator of a make and model approved by UNSW for the examinations. The list of approved calculators is available at [student.unsw.edu.au/exam-approved-calculators-and-computers](http://student.unsw.edu.au/exam-approved-calculators-and-computers)

It is your responsibility to ensure that your calculator is of an approved make and model, and from the [Engineering Student Support Services Centre](#). A calculator with a ticker will not be allowed into the examination room.

## 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 submitting an assessment or sitting an exam.

**Please note** that UNSW now has a [Fit to Sit / Submit rule](#), which means that if you sit an exam or submit a piece of assessment, 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 [Special Consideration page](#).

## 7. Expected resources for students

### **Textbook**

Cengel and Cimbala, Fluid Mechanics Fundamentals and Applications, 2nd Ed in SI unit.

The textbook is available from the UNSW Bookshop and the UNSW Library.

UNSW Library website: <https://www.library.unsw.edu.au/>

Moodle: <https://moodle.telt.unsw.edu.au/login/index.php>

## 8. Course evaluation and development

Feedback on the course is gathered periodically using various means, including the UNSW myExperience process, informal discussion in the final class for the course, and @Á&@ [ |q Á Student/Staff meetings. Your feedback is taken seriously, and continual improvements are made to the course based, in part, on such feedback.

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) 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)

## 10. 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](#)

[Computing Facilities](#)

[Special Consideration](#)

[Exams](#)

[Approved Calculators](#)

[Academic Honesty and Plagiarism](#)

[Disability Support Services](#)

[Health and Safety](#)

[Lab Access](#)

# Appendix A: Engineers Australia (EA) Competencies

## Stage 1 Competencies for Professional Engineers

	<b>Program Intended Learning Outcomes</b>
<b>PE1: Knowledge and Skill Base</b>	PE1.1 Comprehensive, theory-based understanding of underpinning fundamentals
	PE1.2 Conceptual understanding of underpinning maths, analysis, statistics, computing
	PE1.3 In-depth understanding of specialist bodies of knowledge
	PE1.4 Discernment of knowledge development and research directions
	PE1.5 Knowledge of engineering design practice
	PE1.6 Understanding of scope, principles, norms, accountabilities of sustainable engineering practice
<b>PE2: Engineering Application Ability</b>	PE2.1 Application of established engineering