ENGG1300

Engineering Mechanics 1

1. Staff contact details

Contact details and consultation times for course convenor

2. Important links

3. Course details

Credit points

This is a 6 unit-of-credit (UoC) course and involves 6 hours

Learning Outcome		EA Stage 1 Competencies
4.	Demonstrate an ability to communicate clearly and precisely about technical matters related to Engineering Mechanics.	1.6, 3.2
5.	Accomplish hands on tasks that require the application of knowledge of Engineering Mechanics.	2.1, 2.2

4. Teaching strategies

This course will be delivered both in the classroom and online. Full participation in the class means that you will participate fully in both arenas. That is, you will be held accountable for all content, instructions, information, etc. that is delivered either in class or online. There will also be laboratory or practical exercises that you may have to complete during your self-study time.

Online: The online forum for participation in this class is the Moodle Platform. All official online interactions will take place or be linked clearly and appropriately from this site.

In class: There are three in-class activities in a typical week, which we refer to as the Monday Lecture, Tuesday Lecture and Problem Solving Session based on the timetable above.

Both the online and in-class segments of this course are organised on the following principles:

1. **Learning:** Student learning is the first priority - teaching and assessment are secondary concerns. Learning here is defined as gaining new ways of seeing the world, not as being filled with information. We are trying to transform you into engineers and critical thinkers in the discipline.
2. **Peer Interaction:** Learning is a social activity, and research shows that you will learn most and best when you are actively taught by your peers and, in turn, when you teach them.
3. **Authenticity:** We will have as much authenticity of engineering practice as is possible

5.

	Week	Topic	Quiz	Assignment, Lab work or Block Test	Suggested Readings
Block 1	1	Introduction to statics; vectors; units; force systems, moments and couples. Equilibrium; free body diagrams; Equations of Equilibrium			M&K(S) Ch1-2

Assignments

PSS Hand-ins

Students will get 1 mark in the first 15 minutes of class for each week that they show their demonstrators a complete and reasonable attempt at all hand-in questions

An incomplete set of solutions, late arrival or unreasonable attempt will score 0.5 marks

If a student comes late to the PSS or leaves late, their demonstrator will only give them 0.5

If the student brings the PSS Hand-in a week late, they will receive a maximum of 0.5 marks

Zero marks will be awarded for work more than one week late

Block Tests

Use the basic concepts such as Free-Body Diagrams (FBD) and Equations of Equilibrium (EoE)

Equili

Type of Assessment	Notes
Weekly assessment	PSS one week late, 0.5 marks and Moodle, no late submissions
Laboratory	Reports submission via Microsoft Teams
Final Examination	Standard UNSW special consideration for supplementary

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.

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

It is your responsibility to ensure that your calculator is of an approved make and model, and
Engineering Student Supper Services Centre
prior to the examination. Calculators not be
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 eno48004pan am0 g0 G[ux)4(no)5(ts0

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

10.   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
Computing Facilities
Special Consideration
Exams
Approved Calculators
Academic Honesty and Plagiarism
Disability Support Services
Health and Safety
Lab Access

Australian Engineering Stage 1 Competencies

Stage 1 Competencies for Professional Engineers

	Program Intended Learning Outcomes
PE1: Knowledge and Skill Base	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

PE2: Engineering Application Ability