



**MMAN2300**

**Engineering Mechanics 2**

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## 1. Staff Contact Details

### Contact details and consultation times for course convenor

A/Prof Nicole Kessissoglou  
408C, J17  
Tel: (02) 9385 4166  
Email: [n.kessissoglou@unsw.edu.au](mailto:n.kessissoglou@unsw.edu.au)

A/Prof. Zhongxiao Peng  
408B, J17  
Tel: (02) 9385 4142  
Email: [z.peng@unsw.edu.au](mailto:z.peng@unsw.edu.au)

### Demonstrators

Name	Contact email address
David Liu (lead demonstrator)	<a href="mailto:daipei.liu@unsw.edu.au">daipei.liu@unsw.edu.au</a>
Annie Zhang	<a href="mailto:a.y.zhang@unsw.edu.au">a.y.zhang@unsw.edu.au</a>
Mahmoud Karimi	<a href="mailto:m.karimi@unsw.edu.au">m.karimi@unsw.edu.au</a>
Darson Li	<a href="mailto:darson.li@unsw.edu.au">darson.li@unsw.edu.au</a>
Jack Wang	<a href="mailto:z3456486@student.unsw.edu.au">z3456486@student.unsw.edu.au</a>
Felipe Crisostomo	<a href="mailto:j.crisostomo@unsw.edu.au">j.crisostomo@unsw.edu.au</a>
Zahra Faraji Rad	<a href="mailto:z.farajirad@unsw.edu.au">z.farajirad@unsw.edu.au</a>
Muhammad Danish Haneef	<a href="mailto:m.haneef@student.unsw.edu.au">m.haneef@student.unsw.edu.au</a>
Pei Guo	<a href="mailto:pei.guo4@gmail.com">pei.guo4@gmail.com</a>
Daniel Egger	<a href="mailto:d.egger@unsw.edu.au">d.egger@unsw.edu.au</a>
Jay Sul	<a href="mailto:j.sul@unsw.edu.au">j.sul@unsw.edu.au</a>
Matti Zinn	<a href="mailto:z3330238@unsw.edu.au">z3330238@unsw.edu.au</a>
Yashar Shoraka	<a href="mailto:y.shoraka@unsw.edu.au">y.shoraka@unsw.edu.au</a>
Keiren Muir	<a href="mailto:k.muir@redbackracing63.com">k.muir@redbackracing63.com</a>
Thitinatt (Oak) Ukritnukun	<a href="mailto:thitinatt@gmail.com">thitinatt@gmail.com</a>
Vikas Sharma	<a href="mailto:z3416101@student.unsw.edu.au">z3416101@student.unsw.edu.au</a>

## 2. Course details

### Credit Points:

This is a 6 unit-of-credit (UoC) course and involves 5 hours per week (h/w) of face-to-face contact.

The UNSW website states “The normal workload expectations of a student are approximately 25 hours per semester for each UoC, including class contact hours, other learning activities, preparation and time spent on all assessable work. Thus, for a full-time enrolled student, the normal workload, averaged across the 16 weeks of teaching, study and examination periods, is about 37.5 hours per week.”

This means that you should aim to spend about 9 h/w in total on this course. The additional 4 h/w should be spen

After successfully completing this course, you should be able to:

## **Learning**

## 4. Course schedule

Week	Topics	References	Assessment
1	Part A		

## 5. Assessment

<b>Assessment task</b>	<b>Length</b>	<b>Weight</b>	<b>Learning outcomes assessed</b>	<b>Assessment criteria</b>	<b>Due date, time</b>
4 x Quizzes	1 hour each	20% (5% each)	1, 2, 3, 4	Understanding of lecture material	During problem solving classes in weeks 5, 7, 10 and 13.

Late submissions will be penalised 5 marks per calendar day (including weekends). An extension may only be granted in exceptional circumstances. Where an assessment task is



## 6. Expected Resources for students

### Textbooks

Meriam, J.L. and Kraige, L.G. *Engineering Mechanics - Dynamics*, SI Version, 7<sup>th</sup> Edition, Wiley

Rao, S.S. *Mechanical Vibrations*, SI Edition, Pearson Prentice Hall, 2011

Waldron, K.J. and Kinzel, G.L. *Kinematics, Dynamics, and Design of Machinery*, second edition, Wiley, 2003

These books are available in the UNSW library and bookshop.

### Suggested additional reading

Hibbeler, R.C. *Engineering Mechanics Dynamics*, Prentice Hall, New Jersey

Beer, F.P. and Johnston, E.R., *Vector Mechanics for Engineers Dynamics*, McGraw-Hill, New York

Wilson, C.E. and Sadler, J.P. *Kinematics and Dynamics of Machinery*, Third Edition, Prentice Hall, New Jersey

Dimarogonas, A. *Vibration for Engineers*, second edition, Prentice Hall International, 1996

Thomson, W.T. *Theory of Vibration with Applications*, fourth edition, Stanley Thornes, 1998

Inman, D.J. *Engineering Vibration*, Prentice Hall International, 1996

If you wish to explore any of the lecture topics in more depth, then other resources are available and assistance may be obtained from the UNSW Library.

One starting point for assistance is:

<http://info.library.unsw.edu.au/web/services/services.html>

## 7. Course evaluation and development.

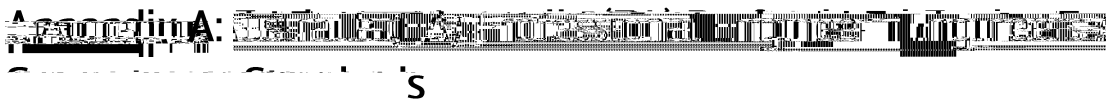
Feedback on the course is gathered periodically using various means, including the Course and Teaching Evaluation and Improvement (CATEI) process, informal discussion in the final class for the course, and the School's Student/Staff meetings. Your feedback is taken seriously, and continual improvements are made to the course based, in part, on such feedback.

## 8. 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: <https://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. If plagiarism is found



<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 methods to complex problem solving
	PE2.2 Fluent application of engineering techniques, tools and resources
	PE2.3 Application of systematic engineering synthesis and design processes
	PE2.4 Application of systematic approaches to the conduct and management of engineering projects
<b>PE3: Professional and Personal Attributes</b>	PE3.1 Ethical conduct and professional accountability
	PE3.2 Effective oral and written communication (professional and lay domains)
	PE3.3 Creative, innovative and pro-active demeanour
	PE3.4 Professional use and management of information
	PE3.5 Orderly management of self, and professional conduct
	PE3.6 Effective team membership and team leadership