MIET2510

Mechanical Design

Week 1 - Introduction

School of Science and Technology, RMIT Vietnam



Teaching Team

Dr. Byron Mason, Lecturer

- Senior Lecturer in Robotics and Mechatronics (RMIT)
- Associate Professor in Advanced Propulsion (Loughborough University, UK)
- Ph.D. in Mechatronic System Validation
- Bachelor of Engineering in Mechanical Engineering



Teaching Team

Dr. Minh Tran, Course Coordinator

Lecturer in Robotics and Mechatronics (RMIT – Since 2019) Ph.D. in Maritime Engineering and Hydrodynamics (UTAS – 2018) Bachelor of Engineering in Aerospace Engineering (VNU – 2014)



Questions and Concerns

- Raise your questions in class at any times.
- Send emails to the lecturer.

Email Subject: "MIET2510 Mechanical Design" + [ID] + [Topics].

Eg: MIET2510 Mechanical Design + s3456789 + Support with Exam.

Please send an email in advance to schedule the meeting.



Topics to be covered in MIET2510

- Kinematics and Dynamics of Machine Mechanisms (W1-W3)
- Machine Elements: Bearing, Gear, Shaft, Belts, etc. (W4-W10)
- Design Project (W2-W11)



Learning Outcomes

- Apply a design problem solving methodology.
- Apply a working knowledge of common machine elements to analyse a mechanical system.
- Design systems using common mechanical components.



Teaching and Learning Schedule

- 2 class sections per week (lecture and tutorial)
- Please check Syllabus on Canvas for detailed and up-to-date information.



Assessments

- 2 Class Tests (70%): Individual, Closed-book test with limited reference papers.
- Design Project (30%): Individual



Learning Materials

- We will provide essential materials for the course, including lecture slides and reading notes.
- Our learning support services, RMIT library for example.
- There are a lot of useful reference resources for from the Internet.
- Many of the course resources are available here (updated regularly): https://bamason2.github.io/miet2510-module/



Canvas Shell

- Log on to the LMS and click on MIET2510.
- A teaching schedule can be found under 'Syllabus'.
- The topics of Mechanical Design are itemized in 'Modules'.
- Details on the problem-solving activities can be seen in 'Assignments'.
- Your course marks will be visible under 'Marks'.



How to succeed in the course

- Participate in the classes.
- Practice makes perfect try the worked examples (without solutions).
- Study in a group
- We, lecturers, are here to give assistance in your studying and we are sharing our experience.



Feedback about this course

- It is highly recommended that suggestions for this course are provided directly to the lecturer as soon as you get any concerns or problems.
- We, as lecturers, are also learners and your feedback on the teaching quality is always appreciated.



What's Next

Q&A Section



Thank you for your attendance :D





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• MIET2510 Mechanical Design: Course Guide Part A and B

