ENGG1000

ENGINEERING DESIGN AND INNOVATION

1. Staff contact details

Contact details and consultation times for course convenor

Project Convenor	Dr. Ang Liu Room 408C, Ainsworth Building (J17) <ang.liu@unsw.edu.au>
Head Demonstrator	Dylan Sanusi-Goh <d.sanusi-goh@unsw.edu.au>

Your first point of contact is your Mentor. Each design team will be assigned a student Mentor to help guide the team throughout the Project. These mentors are all former students who have been very successful in previous design courses and have a wide range of skills and experiences that will, if properly utilised, assist your team to achieve a successful Project outcome. Consultations with your mentor outside of your scheduled time can be made by mutual arrangement.

If your problem cannot be rectified by your mentor, then approach your Project Convenor. However, please not

You will get the opportunity to demonstrate your competency at these skills by experiencing first-hand what is required to design, build and test your solution to an interesting design problem in the same way that professional engineers all over the world are doing right at this moment.

3. Provide a team-based environment so you can experience and learn collaborative skills.

The provision of experienced design **Mentors** who will provide face-to-face feedback

6. Assessment

Assessment overview

Assessment (Task #)	Group Project?	Students per group	Length	Weight	Learning outcomes	Assessment criteria	Due date and submission requirements

Assignments

Detailed descriptions of the assessment tasks for this course will be posted on *Moodle*

T7 Design Report

You You will prepare a design report about the final

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For some assessment items, a late penalty may not be appropriate. These are clearly indicated in the course outline, and such assessments receive a mark of zero if not completed by the specified date. Examples include:

a. Weekly online tests or laboratory work worth a small proportion of the subject mark
b. Online quizzes where answers are released to students on completion, or
c. Professional assessment tasks, where the intention is to create an authentic assessment that has an absolute submission date, or
d. Pass/Fail assessment tasks.

Marking

You should have some access to a copy as it provides useful reading on a number of relevant topics. It is available as a published book and as an eBook. There are copies available for purchase from the UNSW Bookshop and from the University Library Reserved Collection. To save money, your Team could buy a shared copy.

Additional Reading

Other useful references include but are not limited to:

Cross, N. (2000). *Engineering Design Methods: Strategies for Product Design*, 3rd edition, John Wiley and Sons.

Dowling, D., Carew, A., and Hadgraft, R. (2010). *Engineering Your Future: An Australasian Guide*, John Wiley & Sons.

Horenstein, M.N. (2010). *Design Concepts for Engineers*, 4th Edition, Prentice Hall.

Samuel, A., *Make and Test Projects in Engineering Design Creativity, Engagement and Learning,* Springer-Verlag London Limited (2006)

Voland, G. (2004). *Engineering by Design*, 2nd Edition, Pearson/Prentice Hall.

Laboratories

A good engineering designer requires a significant amount skill. This is very similar to learning to ride a bike. You can talk about it for as long as you like, but sooner or later you need to actually get on the bike and ride it. While falling off is a perfectly acceptable outcome for a novice, there are skills that can be developed before you begin.

In each Lab, you will be assessed by your efforts at completing a specified number of activities. These are hands-on activities that are structured to improve your skills in design and aid you in the success of your Major Design Project. Do not copy answers from other

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 the School's