

ENGR 7001 ADVANCED ENGINEERING PROJECT 1

Credit Points 10

Legacy Code 301006

Coordinator Pan Hu ([https://directory.westernsydney.edu.au/search/name/Pan Hu/](https://directory.westernsydney.edu.au/search/name/Pan%20Hu/))

Description In this unit, the students will be working on a major engineering project as a team of 2 to 5 students. The project will be supervised by an academic staff on topics related to his/her research expertise. The students will apply and further develop their expertise in research, engineering project management and planning, work health and safety, and professional writing skills. The students are required to present outcomes using a professional report which should include a background, objectives, a comprehensive literature review, the methodology and a project plan which can then be completed in Advanced Engineering Project 2.

School Eng, Design & Built Env

Discipline Other Engineering And Related Technologies

Student Contribution Band HECS Band 2 10cp

Level Postgraduate Coursework Level 7 subject

Co-requisite(s) ENGR 7013

Restrictions

Students must be enrolled in a postgraduate program

Learning Outcomes

On successful completion of this subject, students should be able to:

1. Identify and critique technical publications
2. Present written professional/technical reports
3. Examine the Engineering profession and the environment in which it operates
4. Apply the process involved in contract and project management in Engineering industry via capstone project
5. Analyse risk situations in an engineering project and apply the theories of risk management to negate or mitigate them
6. Apply Workplace Health and Safety (WHS) requirements to an engineering project

Subject Content

1. Research techniques and technical presentation
2. Technical and environmental risk management
3. Professional management principles and practices
4. Project initiation, tender process and tender analysis
5. Contract management, human resources management and value management

Assessment

The following table summarises the standard assessment tasks for this subject. Please note this is a guide only. Assessment tasks are regularly updated, where there is a difference your Learning Guide takes precedence.

Type	Length	Percent	Threshold	Individual/Group Task
Quiz	1 hour online	20	N	Individual
Proposal	Minimum of 1,500 words	20	N	Group
Report	Minimum of 5000 words per group (students need to state individual contributions)	60	N	Individual

Prescribed Texts

- Pinto, JK 2016, Project management: achieving competitive advantage, 4th edn, Pearson Education, Harlow.

Teaching Periods

Autumn (2022)

Parramatta City - Macquarie St

Day

Subject Contact Pan Hu ([https://directory.westernsydney.edu.au/search/name/Pan Hu/](https://directory.westernsydney.edu.au/search/name/Pan%20Hu/))

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR7001_22-AUT_PC_D#subjects)