

ENGR 7001 ADVANCED ENGINEERING PROJECT 1

Credit Points 10

Legacy Code 301006

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

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

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.

Item	Length	Percent	Threshold	Individual/Group Task
Quiz - Multiple-choice questions	1 hour online	20	N	Individual
Group work - Expression of Interest (EOI) Report	Minimum of 1,500 words	20	N	Group
Progress Report	Minimum of 5000 words	60	N	Individual
Group work (Individual mark awarded)	per group (students need to state individual contributions)			

Prescribed Texts

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

Teaching Periods

2022 Semester 1

Parramatta City - Macquarie St

Day

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

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