

ENGR 7002 ADVANCED ENGINEERING PROJECT 2

Credit Points 10

Legacy Code 301007

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, students will complete the major engineering project commenced in unit 301006 Advanced Engineering Project 1. The students are expected to develop advanced technical knowledge and skills in their field of study as well as the ability to function effectively as an individual in a team, with the capacity to be a leader or manager. The students are required to present outcomes using a professional report and an oral presentation.

School Eng, Design & Built Env

Student Contribution Band HECS Band 2 10cp

Check your HECS Band contribution amount via the Fees (https://www.westernsydney.edu.au/currentstudents/current_students/fees/) page.

Level Postgraduate Coursework Level 7 subject

Pre-requisite(s) ENGR 7001

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. Apply the theoretical knowledge gained during the course to develop practical and innovative engineering solutions.
2. Apply the project management principles to completion of an engineering project.
3. Analyse the importance of client/ end-user consultation and satisfaction and develop engineering communication abilities on good oral presentation and engineering report writing skills.
4. Implement ethical, social, economic and environmental responsibilities that apply to engineers.
5. Apply time and financial management in the context of an engineering project.
6. Apply systems engineering methods for carrying-out systematic research.

Subject Content

1. Development of integrated practical and innovative solutions to engineering problems.
2. Application of engineering project management skills.
3. Client/ end-user consultation process and satisfaction assessment.
4. Development of oral and written presentation skills appropriate to an engineer.
5. Evaluation of social, economic and environmental impacts of an engineering project.
6. Application of time and financial management skills.
7. Risk analysis.
8. Development of research skills.

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 | 1 hour online | 20 | N | Individual |
| Oral Presentation | 15 minutes in total with all team members to present | 20 | N | Individual |
| Report - Students work together but marked on individual basis | 8,000 - 12,000 words per group (individual student contribution has to be stated) | 60 | N | Individual |

Prescribed Texts

- Smith, KA 2014, Teamwork and project management, 4th edn, Team work and project management, McGraw-Hill Education, New York, NY

Teaching Periods

2022 Semester 1

Parramatta City - Macquarie St

Day

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR7002_22-AUT_PC_D#subjects)

2022 Semester 2

Parramatta City - Macquarie St

Day

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