

ENGR 4026 FINAL YEAR PROJECT 2 (UG ENGINEERING)

Credit Points 10

Legacy Code 301246

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

Description This unit continues the on-going work started in unit Final Year Project 1 (UG Engineering). Throughout the semester students will further develop their design, research and presentation skills. This will be achieved through employment of appropriate design/research skills to finish a capstone project, either design-oriented or research-oriented project, which demonstrates student's professional level of executing, testing, documenting an engineering project and completing a technical report.

School Eng, Design & Built Env

Discipline Other Engineering And Related Technologies

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 Undergraduate Level 4 subject

Pre-requisite(s) ENGR 4025

Equivalent Subjects ENGR 4032 Engineering Thesis 2

Restrictions Students must be enrolled in 3728 Bachelor of Engineering (Honours)/Bachelor of Business or 3740 Bachelor of Engineering (Honours) or 3690 Bachelor of Engineering Advanced (Honours) or 3771 Bachelor of Engineering Advanced (Honours) and they must have completed at least 220 credit points.

Learning Outcomes

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

1. Apply project management principles that incorporate time and financial management to develop practical and innovative engineering solutions.
2. Apply effective written and verbal communication skills tailored to the appropriate audience (e.g. for client or end-user consultation, or academic and wider professional community).
3. Design and conduct experiments using relevant research methodology, identify data requirements, develop a research problem, research hypotheses and questions to achieve objectives.
4. Apply systems engineering methods for carrying-out systematic research.
5. Evaluate research outcomes to the particular field and to the realms of the Engineering and Construction professions.
6. Demonstrate the ability to work in a team environment when working in a design-oriented project or undertaking self-motivated research with minimal supervision.

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 and development of good oral and written presentation skills appropriate to an engineer.
4. Evaluation of social, economic and environmental impacts of an engineering project.
5. Application of time and financial management skills and risk analysis as well.
6. 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
Report	8 pages in research paper format	15	N	Individual
Presentation	20 minutes oral presentation during mid-semester break	20	N	Individual
Report	50-70 pages	65	Y	Individual

Prescribed Texts

- Pinto, JK 2016, Project management : achieving competitive advantage, 4th edn, Pearson, Boston

Teaching Periods

Autumn Penrith (Kingswood)

Day

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR4026_22-AUT_KW_D#subjects)

Parramatta - Victoria Rd

Day

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Sydney City Campus - Term 1 Sydney City

Day

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Sydney City Campus - Term 2

Sydney City

Day

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR4026_22-SC2_SC_D#subjects)

Spring

Penrith (Kingswood)

Day

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Parramatta - Victoria Rd

Day

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Sydney City Campus - Term 3

Sydney City

Day

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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR4026_22-SC3_SC_D#subjects)