ENGR 4025 FINAL YEAR PROJECT 1 (UG ENGINEERING)

Credit Points 10

Legacy Code 301245

Coordinator Ankit Agarwal (https://directory.westernsydney.edu.au/search/name/Ankit Agarwal/)

Description This subject describes engineering as a profession, highlighting professional ethics and legal obligations. The focus will be on the development of design skills or research and presentation skills for students enrolled in this subject. This will be achieved through the use of appropriate design/research skills on a capstone project, which will be either design oriented or research oriented on a specialist topic. Under the direction of an academic supervisor and research mentor, the project will demonstrate the student's professional level of identifying, planning, and designing an engineering project while at the same time completing a technical progress report. The capstone project will be continued in the subject Final Year Project 2 (UG Engineering).

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

Co-requisite(s) ENGR 3017

Equivalent Subjects ENGR 4031 Engineering Thesis 1

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) and they must have completed at least 200 credit points.

Learning Outcomes

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

1. Evaluate and critique previous research in terms of its relevance to the given topic and how the latter has contributed to previous research.
2. Examine the Engineering profession from an environmental perspective and use appropriate contract, project, WHS and risk management processes and methodologies to manage an engineering project.
3. Design the major steps in the proposed research by developing the research problem, research hypotheses, research questions and preparing a realistic timeline.
4. Construct experimental design, use appropriate research methodology to identify data requirements and achieve the research objectives.
5. Apply effective written communication skills when preparing professional/technical reports.
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. 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
Proposal	15 to 20 pages	35	N	Individual
Report	30-40 pages	65	Y	Individual

Prescribed Texts

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

Teaching Periods

Autumn (2022)
Penrith (Kingswood)
Day
Subject Contact Ankit Agarwal (https://directory.westernsydney.edu.au/search/name/Ankit Agarwal/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR4025_22-AUT_KW_D#subjects)

Parramatta - Victoria Rd
Day
Subject Contact Ankit Agarwal (https://directory.westernsydney.edu.au/search/name/Ankit Agarwal/)

View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR4025_22-AUT_PS_D#subjects)

Sydney City Campus - Term 1 (2022)
Sydney City
Day
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Sydney City Campus - Term 2 (2022)
Sydney City
Day
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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR4025_22-SC2_SC_D#subjects)

Spring (2022)
Penrith (Kingswood)
Day
Subject Contact Ee Loon Tan (https://directory.westernsydney.edu.au/search/name/Ee Loon Tan/)

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Day
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Sydney City Campus - Term 3 (2022)
Sydney City
Day
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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR4025_22-SC3_SC_D#subjects)

Autumn (2023)
Penrith (Kingswood)
On-site
Subject Contact Ankit Agarwal (https://directory.westernsydney.edu.au/search/name/Ankit Agarwal/)

View timetable (https://classregistration.westernsydney.edu.au/odd/timetable/?subject_code=ENGR4025_23-AUT_KW_1#subjects)

Parramatta City - Macquarie St
On-site
Subject Contact Ankit Agarwal (https://directory.westernsydney.edu.au/search/name/Ankit Agarwal/)

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Sydney City Campus - Term 1 (2023)
Sydney City
On-site
Subject Contact Ankit Agarwal (https://directory.westernsydney.edu.au/search/name/Ankit Agarwal/)

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Sydney City Campus - Term 2 (2023)
Sydney City
On-site
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