ENGR 7028 ENGINEERING PROJECT 1 (PG)

Credit Points 20

Legacy Code 301395

Coordinator Pan Hu (https://directory.westernsydney.edu.au/search/name/Pan Hu/)

Description This subject introduces the professional engineering skills necessary to practice as an engineer, including project management, professional communication, professional ethics and legal obligations. Students are required to conduct a critical literature survey on a relevant area, identify the design or research problems, propose a plan and methodology for the design or research problems, conduct some preliminary work and analysis, present their work, and complete a project proposal and a project report.

School Eng, Design & Built Env

Discipline Engineering and Related Technologies, Not Elsewhere Classified.

Student Contribution Band HECS Band 2 20cp

Level Postgraduate Coursework Level 7 subject

Restrictions

Students must be enrolled in a postgraduate program.

Assumed Knowledge

Knowledge in the relevant field of chosen major.

Learning Outcomes

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

1. Critique previous research in terms of its relevance and contribution to the given topic.
2. Manage an engineering project from an environmental perspective, using appropriate contract, project, WHS and risk management processes.
3. Evaluate the major steps in the proposed research by developing the research problem, research hypotheses, research questions and a realistic timeline.
4. Construct experimental design, using appropriate research methodology, identifying data requirements and conducting relevant research to achieve objectives.
5. Apply effective written and verbal communication skills when preparing professional/technical reports.
6. Work collaboratively in a team setting on a design-oriented project or research-based project under minimal supervision.

Subject Content

Introduction to communication
Workplace communication
Technical writing
Introduction to project management
Ethics and professional code of conduct
Statistical methods
Peer-assessed oral presentation
Literature survey
Research proposal

Preliminary study

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	15-20 pages (5,000-7,500 words)	20	N	Individual
Report	20-50 pages (7,500-1,5000 words including drawings and calculations)	50	Y	Both (Individual & Group)
Presentation	15 minutes	10	N	Both (Individual & Group)
Quiz	1 hour online	20	N	Individual

Teaching Periods

Autumn (2022)
Parramatta - Victoria Rd
Day
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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR7028_22-AUT_PS_D#subjects)

Spring (2022)
Parramatta - Victoria Rd
Day
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View timetable (https://classregistration.westernsydney.edu.au/even/timetable/?subject_code=ENGR7028_22-SPR_PS_D#subjects)

Autumn (2023)
Parramatta - Victoria Rd
On-site
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