

ENGR90025 Multidisciplinary Project

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2011.
Time Commitment:	Contact Hours: 1 x 3 hr workshop per week Total Time Commitment: Estimated 120 hours
Prerequisites:	50 credit points of postgraduate study.
Corequisites:	None
Recommended Background Knowledge:	Ability to work in groups; knowledge of sustainability principles; ability to reflect; writing, speaking and research skills.
Non Allowed Subjects:	None
Core Participation Requirements:	For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Students Experiencing Academic Disadvantage Policy, academic requirements for this subject are articulated in the Subject Description, Subject Objectives, Generic Skills and Assessment Requirements of this entry. The University is dedicated to provide support to those with special requirements. Further details on the disability support scheme can be found at the Disability Liaison Unit website: http://www.services.unimelb.edu.au/disability/
Contact:	Email: roger.hadgraft@unimelb.edu.au (mailto:roger.hadgraft@unimelb.edu.au)
Subject Overview:	Engineers increasingly work on large multidisciplinary projects that embrace many engineering disciplines as well as non-engineers such as architects, economists, bankers, social scientists, medical practitioners, etc. This subject provides an opportunity to experience this kind of project, working in teams with other disciplines to resolve a complex challenge. This project develops the full range of graduate outcomes required for your degree.
Objectives:	On completion of this subject students should be able to demonstrate: <ul style="list-style-type: none"> # Grappling with complex problems, including demonstrating consultative skills with stakeholders # Working effectively with other disciplines, demonstrating tolerance and awareness of other viewpoints # Confidence and flexibility in dealing with uncertainty # Systematic design, problem solving and modelling skills # Self-awareness, including being able to improve your professional practice # The use and integration of the knowledge developed over the course of your degree.
Assessment:	Reflect – Journal and Summary (20%, weekly entry plus review of learning of 1,000 words, reviewed in weeks 6 & 12); Explore the problem (20%, report and presentation of problem analysis: 1,000 words, week 4); Explore the solutions (20%, report and presentation of range of solutions: 1,000 words, week 8); Evaluate the solutions and recommendation (20%, final report of whole process: 1,000 words, week 11); Present and debate (20%, 1,000 words, week 12)
Prescribed Texts:	None
Recommended Texts:	None
Breadth Options:	This subject is not available as a breadth subject.
Fees Information:	Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees
Generic Skills:	At the end of this subject you should have developed abilities to: <ul style="list-style-type: none"> # Apply systems thinking to a complex problem # Apply sustainability principles in decision-making # Deal with uncertainty

	<ul style="list-style-type: none"># Apply a systematic design process, exploring both the problem and the likely solutions# Apply a range of problem solving tools# Use abstraction and modelling and decision-making tools to evaluate solutions# Work effectively in multidisciplinary and multicultural teams# Demonstrate critical self awareness through reflection and a portfolio approach
Related Course(s):	Master of Engineering Project Management Master of Engineering Project Management
Related Majors/Minors/ Specialisations:	Master of Engineering (Biomolecular) Master of Engineering (Chemical)