CVEN90020 Research Topic

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2010, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 1 hour per week plus as arranged between student and supervisor Total Time Commitment: 150 hours per semester
Prerequisites:	# All core 300 level subjects or # Admission to Master of Engineering
Corequisites:	None
Recommended Background Knowledge:	None
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/
Coordinator:	Assoc Prof Jeffrey Walker, Dr Tuan Ngo
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Subject Overview:	On conclusion of their project, students should have an appreciation of procedures involved in conducting research and have gained experience in scientific writing, and in poster and oral presentations. The subject includes supervision of project selection, literature review, methodology development, analysis and reporting of a research investigation on a relevant engineering topic.
Objectives:	At the end of this subject, students should be able to # Search, analyse and document engineering science and other literature in order to determine the need for further research in a chosen area # Devise a methodology of investigation to improve knowledge or understanding of a chosen topic # Collect and analyse a range of data (both qualitative and quantitative) and/or undertake model simulation to improve understanding of a chosen topic # Write a report that follows good engineering science practice # Present a poster and oral presentation on the investigation to a audience of peers

Assessment:	One mid-semester research proposal report of up to a total of 1500 words (10%)One mid-semester poster presentation (5%)One end-of-semester research report up to a total of 4000 words (70%)One exam period 15 minute seminar presentation (15%)
Prescribed Texts:	N/A
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:	# Ability to apply knowledge of basic science and engineering fundamentals # Ability to communicate effectively, not only with engineers but also with the community at large # In-depth technical competence in at least one engineering discipline # Ability to undertake problem identification, formulation and solution # Understanding of professional and ethical responsibilities and commitment to them # Expectation of the need to undertake lifelong learning, capacity to do so # Capacity for independent critical thought, rational inquiry and self-directed learning # Intellectual curiosity and creativity, including understanding of the philosophical and methodological bases of research activity # Openness to new ideas and unconventional critiques of received wisdom # Profound respect for truth and intellectual integrity, and for the ethics of scholarship # International awareness and openness to the world, based on understanding and appreciation of social and cultural diversity and respect for individual human rights and dignity
Notes:	# This subject is co-taught with 421-643 # Dr Tuan Ngo will coordinate semester 1 # Assoc Prof Jeff Walker will coordinate semester 2
Related Course(s):	Bachelor of Engineering (EngineeringManagement) Environmental Bachelor of Engineering (Environmental Engineering) Bachelor of Engineering (Environmental) and Bachelor of Arts Bachelor of Engineering (Environmental) and Bachelor of Commerce Bachelor of Engineering (Environmental) and Bachelor of Laws Bachelor of Engineering (Environmental) and Bachelor of Science Master of Engineering Structures Master of Engineering Structures Master of Environment Master of Environment Postgraduate Certificate in Environment Postgraduate Diploma in Environment