

CVEN90022 IE Research Project 1

OVERVIEW OF THE Research Project 1

Credit Points:	12.50									
Level:	9 (Graduate/Postgraduate)									
Dates & Locations:	2012, 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: 22 (10 hours in workshops, and 12 hours progress meetings/feedback by academic supervisors) Total Time Commitment: Not available									
Prerequisites:	This is a Capstone subject and may only be taken in the final three semesters of study									
Corequisites:	None									
Recommended Background Knowledge:	None									
Non Allowed Subjects:	When undertaking this subject students can not gain credit for the following subjects: <table><tr><th>Subject</th><th>Study Period Commencement:</th><th>Credit Points:</th></tr><tr><td>CVEN90047 IE Research Project 2</td><td>Semester 1, Semester 2</td><td>25</td></tr><tr><td>CVEN90020 Research Topic</td><td>Not offered 2012</td><td>12.50</td></tr></table>	Subject	Study Period Commencement:	Credit Points:	CVEN90047 IE Research Project 2	Semester 1, Semester 2	25	CVEN90020 Research Topic	Not offered 2012	12.50
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CVEN90047 IE Research Project 2	Semester 1, Semester 2	25								
CVEN90020 Research Topic	Not offered 2012	12.50								
Core Participation Requirements:	<p><p>For the purposes of considering request for Reasonable Adjustments under the Disability Standards for Education (Cwth 2005), and Student Support and Engagement Policy, academic requirements for this subject are articulated in the Subject Overview, Learning Outcomes, Assessment and Generic Skills sections of this entry.</p> <p>It is University policy to take all reasonable steps to minimise the impact of disability upon academic study, and reasonable adjustments will be made to enhance a student's participation in the University's programs. Students who feel their disability may impact on meeting the requirements of this subject are encouraged to discuss this matter with a Faculty Student Adviser and Student Equity and Disability Support: http://services.unimelb.edu.au/disability</p></p>									
Coordinator:	Assoc Prof Graham A. Moore, Dr Biju George									
Contact:	Dr Graham Moore grahamam@unimelb.edu.au (mailto:grahamam@unimelb.edu.au)									
Subject Overview:	<p>This subject provides the capstone experience for students in Infrastructure Engineering. Students will combine their expertise in interdisciplinary groups to address real-world problems, typically in contact with industry</p> <p>Project topics will be advertised well in advance of commencement of the subject so that students can make an informed choice of topic and enrol early. Students must register their topic, group and supervisor before the subject commences</p> <p>The first five-weeks address research training and comprise weekly structured two-hour impulse workshops with group homework on topics such as project development, literature review, methodology development, presentations and scientific writing. Students will practise this output through their project topics with supervisors providing feedback on the results</p> <p>Students then continue the project within their groups and with regular progress meetings with their supervisor for the remainder of the year. The project culminates with students presenting their project and findings on a poster at a student expo and also in written form in the style of a conference paper</p> <p>Students with an average score of H1 in the previous 100 points of study and an interest in a PhD have the opportunity to undertake an individual research project</p>									

	Note: CVEN90022 IE Research Project 1 is of year-long duration, students may commence in either Semester 1 or Semester 2 and continue in the consecutive semester. Students wishing to undertake the project component through an Industry internship during the university breaks must have completed the Research Training component (first five weeks of first semester), ie. students undertaking an internship during the Winter break must commence CVEN90022 in Semester 1, similarly students undertaking an internship during the Summer break must commence CVEN90022 in Semester 2
Objectives:	<p>On completion of this subject, students should be able to:</p> <ul style="list-style-type: none"> # Search, analyse and document engineering science and other literature in order to determine the need for further research in a chosen area # Synthesize an hypothesis to be tested # Devise a methodology of investigation to test the hypothesis # Collect and analyse a range of data (qualitative and/or quantitative) and/or undertake computer modelling and simulation to implement the methodology # Write project reports which follow good engineering science practice # Present a poster of the findings of an investigation
Assessment:	<p>Workshops require a deliverable (by each group) equivalent to 1000 words, due the following week. These deliverables will be marked Pass/Fail only. Passing all deliverables is a hurdle requirement to pass the subject By mid-project each group must submit a report, compiled from the workshop results and feedback received (2000 words, 20%). Passing is a hurdle requirement The project culminates in a poster presentation (Poster 15%, Presentation 15%) and a final report in the style of a conference paper (15 pages, 30%). The group marks of each component will be broken down into individual marks by a peer assessment. Students will also submit their individual progress reports and minutes of supervisor meetings with their final report (10%) Each student must present their project contribution in their e-portfolio for Engineering Practice (10%) Further Hurdle Requirements: The following must be satisfied in order to pass the subject: Students must register for a project topic prior to Day 1 of first semester of study Attendance at a minimum of 70% of the Departmental research seminar in the project period, submission of an individual reflective diary will be evidence of attendance which will be marked Pass/Fail A Pass mark for the Mid-project report</p>
Prescribed 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:	<ul style="list-style-type: none"> # Discernment of knowledge development and research directions within the engineering discipline # Ability to undertake problem identification, formulation and solution # Ability to communicate effectively, with the engineering team and with the community at large # Ability to manage information and documentation # Capacity for creativity and innovation # Understanding of professional and ethical responsibilities, and commitment to them
Notes:	This subject is co-taught with CVEN90020 and CVEN90022
Related Course(s):	<p>Bachelor of Engineering (Environmental) and Bachelor of Arts Bachelor of Engineering (Environmental) and Bachelor of Commerce Master of Engineering Management Master of Engineering Project Management Master of Engineering Project Management Master of Environmental Engineering Master of Environmental Engineering</p>
Related Majors/Minors/Specialisations:	<p>Master of Engineering (Civil) Master of Engineering (Environmental) Master of Engineering (Geomatics)</p>

Master of Engineering (Structural)