ENEN90028 Monitoring Environmental Impacts

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2011. Compulsory five day field camp in the second week of the mid-semester break. Students will be required to fund their own accommodation and meals costs for duration of camp, estimated total cost no greater than $300.
Time Commitment:	Contact Hours: 45 hours (Lectures: 10 hours per semester, Tutorials: 10 hours per semester, Field camp: 5 days) Total Time Commitment: 120 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	Completion of the following subject or equivalent will assist with learning in this subject: **Subject** / **Study Period Commencement:** / **Credit Points:** ENEN20002 Earth Processes for Engineering / Not offered 2011 / 12.50
Non Allowed Subjects:	Credit points will not be given for either of the following subjects when taking this subject **Subject** / **Study Period Commencement:** / **Credit Points:** 421-325 Field Data Acquisition and Analysis / Not offered 2010 / OR **Subject** / **Study Period Commencement:** / **Credit Points:** 421-525 Field Data Acquisition and Analysis / Not offered 2010 /
Core Participation Requirements:	For the purposes of considering requests 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:	Dr Michael Stewardson **mjstew@unimelb.edu.au (mailto:mjstew@unimelb.edu.au)**
Subject Overview:	The subject has a strong practical component with a five day field camp during the mid-semester break involving bothe student and tutor-led environmental monitoring activities. There is also a semester long project to design and implement an environmental monitoring program supported by weekly practice classes. Component skills taught in this subject: # Conceptualising environmental responses # Selecting and using environmental measurement techniques (considering scale issues) # Analysis of environmental monitoring data
Objectives:	On completion of this subject students should be able to: # Identify the practical challenges of conducting environmental observations # Design an environmental monitoring program to meet the requirements of a client, including conceptualising the environmental system under investigation # Select environmental sensors, sampling theory and field techniques # Use and interpret environmental measurements

	# Use a range of environmental instrumentation # Demonstrate team and communication skills through the participation in a major group project
Assessment:	One 2000 word individual report, due at the end of the semester (25%)Field camp activities in mid-semester break (25%)One 3000 word group report, due after field camp (15%)Three x 15 minute tests distributed throughout the semester (15%)Oral presentations, during the semester and field camp (15%)Reflective on-line journal, maintained during semester (5%) Hurdle requirement: Participation in the field camp is a hurdle requirement to pass this subject
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:	# Ability to undertake problem identification, formulation, and solution # Ability to utilise a systems approach to complex problems and to design and operational performance # 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 # Ability to function effectively as an individual and in multidisciplinary and multicultural teams, as a team leader or manager as well as an effective team member
Notes:	Field trip will have associated food and accommodation costs
Related Course(s):	Master of Engineering Management Master of Engineering Management Master of Engineering Project Management Master of Engineering Project Management Master of Environmental Engineering Master of Environmental Engineering Postgraduate Certificate in Engineering
Related Majors/Minors/ Specialisations:	Environmental Science Environmental Science Integrated Water Catchment Management Master of Engineering (Environmental) Master of Engineering (Geomatics)