ENEN90005 Environmental Management ISO 14000

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2013. Includes two compulsory site visits and some weekend activities
Time Commitment:	Contact Hours: 36 hours of lectures and workshops; two site visits Total Time Commitment: 120 hours
Prerequisites:	None
Corequisites:	None
Recommended Background Knowledge:	An Engineering undergraduate degree
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 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. 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
Contact:	Dr Graham Moore **grahamam@unimelb.edu.au (mailto:grahamam@unimelb.edu.au)**
Subject Overview:	Environmental Management ISO 14000 will cover the following related areas of study: the history of EMS from Demming Wheel to ISO 14000 series; the elements of an EMS; systems audit and review and gap analysis; legal requirements, due diligence document control, liability and ISO 9000 review; regulation and accreditation; community consultation; emerging issues in environmental management.
Objectives:	On completion of this subject students should be able to: # Describe the role of the ISO 14000 series of standards in industry # Describe, in detail, the elements of the ISO 14001 and ISO 14004 standards # Use risk management standards to rewiew and prioritise the environmental risks of a facility # Write an EMS manual for particular business # Conduct an environmental performance audit of an industry # Conduct an EMS systems audit of a commercial operation # Prepare an environmental emergency response manual # Identify production processes and likely risks to the environment embodied in such processes # Be familiar with the role of the ISO 14000 series of standards in industry
Assessment:	Assessment for this subject is comprised of the following: Conduct of a performance audit on an industrial process (30%) Conduct of an EMS audit on a commercial operation (30%) Production of an EMS ISO 14001 manual for a commercial operation (35%) A computer-based exam on the elements of ISO 14001 (5%)
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 select and apply international engineering standards to a process # Ability to design and implement a systems-based approach to managing risks # Ability to apply knowledge of basic risk engineering fundamentals # In-depth technical competence in both environmental and risk engineering disciplines # Ability to undertake problem identification, formulation and solution in respect to risk control # Capacity for independent critical thought, rational inquiry and self-directed learning # Effective risk communication with senior management, risk engineers team and the community
Notes:	Safety boots, high visibility vests and safety spectacles are required for site visits.
Related Course(s):	Bachelor of Engineering (Civil Engineering) Master of Engineering Project Management Master of Engineering Project Management Master of Environmental Engineering Master of Environmental Engineering Master of Philosophy - Engineering Master of Urban Planning Ph.D.- Engineering Postgraduate Certificate in Engineering
Related Majors/Minors/ Specialisations:	B-ENG Civil Engineering stream Climate Change Energy Studies Environmental Science Environmental Science Governance, Policy and Communication Master of Engineering (Civil) Master of Engineering (Environmental) Master of Engineering (Geomatics) Waste Management