ENGR90021 Engineering Communication

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: 36 hours (Lectures: 1 hour per week, Workshops: 2 hours per week) Total Time Commitment: 120 hours
Prerequisites:	# Entry into the Master of Engineering OR the Master of Engineering Management OR # 200 points of undergraduate study
Corequisites:	None
Recommended Background Knowledge:	None
Non Allowed Subjects:	Credit points will not be given for the following subjects when taking this subject

Subject	Study Period Commencement:	Credit Points:
ENGR10004 Engineering Systems Design 1	Semester 1, Semester 2	12.50
ENGR10003 Engineering Systems Design 2	Summer Term, Semester 2	12.50

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
Coordinator:	Assoc Prof David Shallcross
Contact:	**dcshal@unimelb.edu.au (mailto:dcshal@unimelb.edu.au)**
Subject Overview:	This subject introduces the nature of engineering work, at the heart of which is communication and problem solving using sustainability principles. Specific topics include: # Skills required for engineering practice # The engineering recruitment process # Engineering problem solving # Systems thinking and design # Teamwork # Meetings and group dynamics # Oral and written communication # Use of library services and information services

	# Sharing information and knowledge management # Creation of alternative solutions # Evaluation and decision making processes using sustainability
Objectives:	# Describe the role of engineers in an engineering organisation # Work effectively in a small team, including evaluating peer and team performance # Use a systems approach to simplify a complex problem # Identify information needs related to a problem and seek answers to these needs # Document, store and transmit information for the benefit of the team # Present information orally, in writing and in drawings # Create and research alternative solutions to a problem # Evaluate solutions against sustainability criteria
Assessment:	Team charter (500 words), due week 4 (5%) Problem definition (Oral and 500 words), due week 5 (10%) Employment skills assignment (500 words), due week 6 (5%) Research report (2000 words), due week 7 (20%) Final report and brochure (1500 words), due week 11 (30%) Defence (Oral), week 12 (10%) Weekly blog and personal learning journal (2000 words), due week 12 (20%)
Prescribed Texts:	Engineering Your Future (D Dowling, A Carew & R Hadgraft), Wiley, 2010
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 communicate effectively, with the engineering team and with the community at large # 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 # Ability to undertake problem identification, formulation and solution # Ability to utilise a systems approach to complex problems and to design and operational performance # Understanding of social, cultural, global and environmental responsibilities and the need to employ principles of sustainable development # Ability to manage information and documentation # Capacity for lifelong learning and professional development
Related Course(s):	Master of Engineering Management Master of Engineering Management Master of Engineering Project Management Master of Engineering Project Management
Related Majors/Minors/ Specialisations:	Master of Engineering (Biomedical) Master of Engineering (Biomolecular) Master of Engineering (Chemical) Master of Engineering (Civil) Master of Engineering (Electrical) Master of Engineering (Environmental) Master of Engineering (Geomatics) Master of Engineering (Mechanical) Master of Engineering (Mechatronics) Master of Engineering (Software) Master of Engineering (Structural)