

411-343 Chemical Engineering Management

Credit Points:	12.50
Level:	3 (Undergraduate)
Dates & Locations:	2009, This subject commences in the following study period/s: Semester 1, - Taught on campus.
Time Commitment:	Contact Hours: Forty-eight hours. Total Time Commitment: Not available
Prerequisites:	-
Corequisites:	-
Recommended Background Knowledge:	-
Non Allowed Subjects:	-
Core Participation Requirements:	-
Coordinator:	Assoc Prof Sandra Kentish
Contact:	-
Subject Overview:	<p>For long term sustainability, a company must focus on it's Triple Bottom Line (Financial performance, Environmental performance, and a Sociological performance). The objective of this course is to expose students to the key parameters needed to set and manage performance criteria in each of those areas. Students successfully completing this unit will have developed an appreciation of project development and the profitability analysis of projects, environmental management and sustainable development, the management of safety, and other managerial issues affecting the engineer.</p> <p>This subject will include the following topics:</p> <ul style="list-style-type: none"> # Financial performance: The stages of a Project; How to carryout a Feasibility Study; Revenue, Capital & Operating Cost Forecasting; Simple Accounting; Profitability Analysis and Applications; Project Management & Networks. # Environmental performance: Sustainable Development: Global Warming & Emission control; Water Management. # Sociological performance: Occupational Health & Safety (incl. Safety Management, P&IDs & Hazop); Ethical issues facing the engineer; Industrial Relations; Product Development & Intellectual Property; Legal issues facing the chemical engineer.
Objectives:	<p>On completion of this subject students should be able to:</p> <ul style="list-style-type: none"> # explain the professional and ethical responsibilities of an engineer; # discuss a broad range of managerial issues affecting the engineer; # utilize the principles of sustainable design and development and of safety management to evaluate the feasibility of engineering proposals complete a profitability analysis of an engineering project.
Assessment:	An assignment not exceeding a total of 3000 words plus accompanying tables and calculations (20%) and a final examination of three hours (80%).
Prescribed Texts:	-
Recommended Texts:	Information Not Available
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"># Understanding the professional and ethical responsibilities of an engineer;# Understanding of the principles of sustainable design and development;# Ability and self-confidence to comprehend complex concepts, to express them lucidly and to confront unfamiliar problems.
Related Course(s):	Bachelor of Engineering (Chemical Engineering) Bachelor of Engineering (Chemical and Biomolecular Engineering) Bachelor of Engineering (Chemical) and Bachelor of Arts Bachelor of Engineering (Chemical) and Bachelor of Commerce Bachelor of Engineering (Chemical) and Bachelor of Laws Bachelor of Engineering (Chemical) and Bachelor of Science Bachelor of Engineering (EngineeringManagement) Chemical