411-445 Process Engineering 3

Credit Points:	12.500
Level:	Undergraduate
Dates & Locations:	2008, This subject commences in the following study period/s: Semester 1, - Taught on campus.
Time Commitment:	Contact Hours: Forty-eight hours comprising 12 hours of lectures and 36 hours of problem-solving classes Total Time Commitment: Not available
Prerequisites:	411-331 Heat and Mass Transport Processes 1, 411-303 Reactor Engineering (prior to 2005 411-433), 411-335 Biochemical/Environmental Engineering 1B, 411-336 Process Dynamics and Control and 411-337 Practical and Computer Laboratory
Corequisites:	None
Recommended Background Knowledge:	None
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
Coordinator:	Assoc Prof D E Dunstan
Subject Overview:	Students completing this subject will develop experience in critical thinking by tackling ill-defined engineering tasks as well as organising and prioritising tasks to meet deadlines will be developed. Their written communication skills will be enhanced. They will have an appreciation of the documents used in the design of process plants and their awareness will be strengthened of the resources available for use in the design of chemical plants. Their understanding of the issues relating to project and contract management will be deepened. Content: Practice in conducting chemical plant feasibility and design studies through a series of assignments in the following areas: process plant economic analysis, sensitivity of economics to external influences, consideration of political, environmental and other effects on project viability. Integrated process design of chemical plants including the necessary documentation and the consideration of control strategy for safe operation. Discussion of the various tools and resources available for design of chemical plants. Issues relating to project and contract management.
Assessment:	Twelve variously weighted written assignments spread across the semester; many are completed within the subject's weekly 3-hour class sessions.
Prescribed Texts:	None
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:	

Related Course(s):	Bachelor of Engineering (Chemical Engineering) Bachelor of Engineering (Chemical and Biomolecular Engineering) Bachelor of Engineering (Chemical) and Bachelor of Science Bachelor of Engineering(Biochemical Engineering)and Bachelor of Science