

BMEN90019 Biomedical Engineering Management

Credit Points:	12.50
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	This subject is not offered in 2014.
Time Commitment:	Contact Hours: 48 contact hours (3 hours of lectures and 1 hour of tutorial per week) Total Time Commitment: 200 hours
Prerequisites:	None
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 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:	Assoc Prof. David Grayden Email: grayden@unimelb.edu.au (https://mce_host/faces/htdocs/grayden@unimelb.edu.au)
Subject Overview:	<p>AIMS</p> <p>This subject covers key aspects of engineering management to help students prepare for working in biomedical industry.</p> <p>INDICATIVE CONTENT</p> <p>Topics include:</p> <p>Origins and development of Australian engineering organisations, the engineer and professional practice, the functions of the professional societies, engineers in government-national, state and local; case studies in engineering practice and technological innovation discussing the management process, embracing planning, organisation, leadership and control of human, physical and financial resources in public and private sector; financial performance including the stages of an engineering project, the feasibility study, concepts of revenue, capital and operating cost forecasting, simple accounting, profitability analysis; biomedical engineering management including responsibility, authority, human relations, industrial relations, quality and environmental management systems including consideration of the ISO 9000 and 14000 series requirements.</p>
Learning Outcomes:	<p>INTENDED LEARNING OUTCOMES (ILO)</p> <p>Having completed this unit the student is expected to:</p> <ol style="list-style-type: none"> 1. Explain the professional and ethical responsibilities of an engineer 2. Discuss a broad range of managerial issues affecting the engineer 3. Utilise the principles of sustainable design and development and of safety management to evaluate the feasibility of engineering proposals 4. Complete a profitability analysis of an engineering project
Assessment:	One assignment of 1500 words plus supporting data, due around week 9 (30%). One assignment of 1000 words plus supporting information, due around week 11 (20%). One end-of-semester exam of three hours duration (50%). Hurdle requirement: Students must pass end

	of semester exam to pass the subject. Intended Learning Outcomes (ILOs) 1, 2, 3 and 4 are assessed in the assignments and the exam.
Prescribed Texts:	TBA
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"> # Ability to undertake problem identification, formulation, and solution # Understanding of social, cultural, global, and environmental responsibilities and the need to employ principles of sustainable development # Ability to conduct an engineering project # Understanding of the business environment # Ability to communicate effectively, with the engineering team and with the community at large # Understanding of professional and ethical responsibilities, and commitment to them # 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
Related Course(s):	Master of Biomedical Engineering
Related Majors/Minors/Specialisations:	Master of Engineering (Biomedical)