BMEN90019 Biomedical Engineering Management

Credit Points:	12.5
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus.
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/
Coordinator:	Prof David Grayden
Contact:	Prof. David Grayden Email: **grayden@unimelb.edu.au (https://mce_host/faces/htdocs/grayden@unimelb.edu.au)**
Subject Overview:	**AIMS** This subject covers key aspects of engineering management to help students prepare for working in the biomedical engineering industry. **INDICATIVE CONTENT** Topics include: The engineer and professional practice, the functions of professional societies; systems engineering and management processes of planning, organisation, leadership and control of human, physical and financial resources; financial performance including the stages of an engineering project, performance measurement, concepts of revenue, capital and operating cost forecasting, simple accounting, profitability analysis; biomedical engineering management including responsibility, authority, human relations, industrial relations, standards and quality management systems including ISO 9000 series requirements; intellectual property and commercialisation.
Learning Outcomes:	**INTENDED LEARNING OUTCOMES (ILO's)** Having completed this unit the student is expected to: 1 Describe the professional and ethical responsibilities of an engineer 2 Discuss a broad range of managerial issues affecting the engineer 3 Utilise the principles of systems engineering and project management to evaluate the feasibility of engineering proposals 4 Complete a profitability analysis of an engineering project or enterprise

Assessment:	One assignment of 1500 words plus supporting data, due around week 6, requiring 27-30 hours of work per student (20%). ILO's 1-4 are assessed in the assignment. One assignment of 1000 words plus supporting information, due around week 10, requiring 13-15 hours of work (10%). ILO's 1-4 are assessed in the assignment. One end-of-semester exam of three hours duration (70%). ILO's 1-4 are assessed in the exam. Hurdle requirement: Students must pass end of semester exam to pass the subject.
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:	Upon completion of this subject, students should have developed the following generic skills: # 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 Majors/Minors/ Specialisations:	Master of Engineering (Biomedical)