

ENGM90016 Engineering Investment Strategy

Credit Points:	12.5
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2016, Parkville This subject commences in the following study period/s: Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 36 hours (Lectures: 24 hours per semester; Tutorials: 12 hours per semester) Total Time Commitment: 200 Hours
Prerequisites:	Students must have completed total of 50 points of subjects from the specialisation and business electives.
Corequisites:	None
Recommended Background Knowledge:	Students are assumed to have some working knowledge in the areas of engineering, technology and business although some of the essential principles will be reviewed.
Non Allowed Subjects:	None
Core Participation Requirements:	<p><p>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.</p> <p>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</p></p>
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Subject Overview:	<p>AIMS</p> <p>This subject provides an opportunity for students to work in teams to integrate concepts, principles, models and theories related to engineering and/or project management principles and practice, contract and procurement strategies, finance and management strategy. It will make use of business cases, or simulation of business cases that are relevant to decision making and practice in the engineering management profession.</p>
Learning Outcomes:	<p>On successful completion of this subject, students should be able to:</p> <ol style="list-style-type: none"> 1 Work in teams to formulate business cases and proposals for engineering projects to the senior levels of organisations such as the Board of Directors 2 Identify key issues encountered in engineering management and/or engineering projects, evaluate among alternative engineering solutions and make recommendations based on best possible project 3 Devise and apply decision criteria to economic and financial analysis outcomes, and use them to make informed decisions as well as to make estimates in budgets 4 To analyse information and organise tasks to create a complete project management plan which may include but not limited to scoping, task definition, cost modelling, budgeting, risk management, procurement, schedule, sequencing of tasks and control measures 5 Demonstrate the ability to comply with legal and other compliance frameworks in the engineering management process

Assessment:	Group Project (Case or Simulation) (45%) participation and performance in a case study or computer simulation, one report of up to 5000 words (excluding appendices and supporting material) outlining the key findings and recommendations, requires 100-120 hours work, due end semester. Intended Learning Outcomes (ILOs) 1 to 5 are addressed in this assessment Poster (10%) to be used as a visual tool during the presentation at the Conference/to a Board, required 15-20 hours work, due end semester. ILOs 1 and 2 are addressed in this assessment Presentation at a Conference or to a Board (15%) 20 minute presentation with 5 minutes for questions and answers, requires 20-30 hours work, due end semester. ILOs 1 and 2 are addressed in this assessment Individual assignment (30%) of 3000 words, requires 50-60 hours work, due mid-semester. ILOs 2, 3 and 4 area addressed in this assignment.
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:	On successful completion of this subject, students should have improved their skills in the following: <ul style="list-style-type: none"> # Analytical skills, analysing and identifying key issues in engineering projects # Working in teams, to formulate problems and to provide solutions to these problems # Team work, develop and enhance their abilities to work in a team environment # Communication skills, be able to interact effectively with people especially with other engineers to broaden their knowledge and achieve successful outcomes in an engineering project # Management skills - in terms of ability to realistically assess the scope and dimensions of a project or task, and employ appropriate planning and time management skills to achieve a substantial outcome
Related Course(s):	Master of Engineering Management