

## ENGM90010 Management of Technological Enterprises

<b>Credit Points:</b>	12.50
<b>Level:</b>	9 (Graduate/Postgraduate)
<b>Dates &amp; Locations:</b>	This subject is not offered in 2014.
<b>Time Commitment:</b>	Contact Hours: 36 hours, comprising of one 1-hour lecture and one 2-hour tutorial per week Total Time Commitment: 200 hours
<b>Prerequisites:</b>	None
<b>Corequisites:</b>	None
<b>Recommended Background Knowledge:</b>	None
<b>Non Allowed Subjects:</b>	None
<b>Core Participation Requirements:</b>	<p>&lt;p&gt;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.&lt;/p&gt;         &lt;p&gt;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: &lt;a href="http://services.unimelb.edu.au/disability"&gt;http://services.unimelb.edu.au/disability&lt;/a&gt;&lt;/p&gt;</p>
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<b>Subject Overview:</b>	<p><b>AIMS</b>            This subject uses examples to explore strategic decision-making, organisational design, culture and change, communication, leadership and the capturing of enterprise knowledge in technological businesses. The management of people, the mentoring of technical professionals, codes of ethics, the interface with customers, consumer behaviour, the development and maintenance of business networks, engineering consultancy practices, and the development of technology markets are considered. Students will be given an overview of various legal aspects regarding occupational health and safety, contract law, negligence, professional liability, the Trade Practices Act and intellectual property with reference to technology businesses. Accordingly, the subject is relevant to all engineering students providing them an introduction into the management of a business.</p> <p><b>INDICATIVE CONTENT</b>            See the Intended Learning Outcomes (ILOs) for information.</p>
<b>Learning Outcomes:</b>	<p><b>INTENDED LEARNING OUTCOMES (ILO)</b>            Having completed this subject the student is expected to:</p> <ol style="list-style-type: none"> <li>1 Conduct a strategic analysis of a technological enterprise regarding core technical and organisational competencies, competitive forces, and competitive advantage</li> <li>2 Link business strategies such as collaboration, joint ventures, diversification, integration and outsourcing, with organisational design, organisational structure and technological forecasting</li> <li>3 Manage the interrelationships between technological trends, innovation, sustainability, organisational culture, organisational change, communication and leadership in technology based enterprises</li> </ol>

	<ol style="list-style-type: none"> <li>4 Establish, expand and manage an engineering consultancy, identify business opportunities, build and maintain client networks</li> <li>5 Apply the codes of ethics and professional conduct that govern the behaviour of engineering managers in a global and multicultural business environment</li> <li>6 Apply risk management principles to engineering practice</li> <li>7 Advise how knowledge management principles can be applied to ensure efficient engineering practice</li> <li>8 Understand in sufficient detail the law of contracts in order to instruct lawyers, to manage contracts and to negotiate contracts with clients</li> <li>9 Have sufficient knowledge of the Tort of Negligence, the Trade Practices Act and professional liability to manage a technology business effectively</li> <li>10 Be familiar with legislation on Occupational Health and Safety relevant to different managerial levels</li> <li>11 Understand international intellectual property legislation in order to instruct patent lawyers, to manage intellectual property in a technology business, and to integrate intellectual property into a wider commercialisation strategy</li> </ol>
<b>Assessment:</b>	<p>One 1,000 word research essay, due in week 5 (20%), associated to Intended Learning Outcomes (ILOs) 1-4          One 1,000 word personal learning journal and summary, due weeks 6 and 12 (20%), associated to all ILOs and the generic skills          One 1,000 word company report, due week 12 (20%), associated to all ILOs          One 500 word final presentation, due week 11/12 (10%), associated to all ILOs and generic skills          One two hour examination held in the examination period (30%), associated to all ILOs          Hurdle Requirement: A pass must be achieved in the examination component in order to pass the subject.</p>
<b>Prescribed Texts:</b>	Morse, L.C. and Babcock, D.L., 5th ed, 2010 <i>Managing Engineering and Technology</i> . Prentice Hall
<b>Breadth Options:</b>	This subject is not available as a breadth subject.
<b>Fees Information:</b>	Subject EFTSL, Level, Discipline & Census Date, <a href="http://enrolment.unimelb.edu.au/fees">http://enrolment.unimelb.edu.au/fees</a>
<b>Generic Skills:</b>	<ul style="list-style-type: none"> <li># Ethical conduct and professional accountability</li> <li># Effective oral and written communication in professional and lay domains.</li> <li># Creative, innovative and pro-active demeanour.</li> <li># Professional use and management of information.</li> <li># Orderly management of self, and professional conduct.</li> </ul>
<b>Notes:</b>	<p><b>LEARNING AND TEACHING METHODS</b>          Intensive and practically oriented lectures each week prepare the students for 2 hours of tutorials per week. The tutorials involve guided group work and discussions to learn to apply the material presented in the lecture in business cases.</p> <p><b>INDICATIVE KEY LEARNING RESOURCES</b>          Lectures are recorded (voice and slides).</p> <p>Morse, L.C. and Babcock, D.L., <i>Managing Engineering and Technology</i>. Prentice Hall</p> <p><b>CAREERS / INDUSTRY LINKS</b>          The lecturer has industry experience, and invites a few guest speakers from industry during the semester.</p>
<b>Related Course(s):</b>	<p>Master of Engineering Management          Master of Engineering Management          Master of Engineering Project Management          Master of Engineering Project Management</p>
<b>Related Majors/Minors/ Specialisations:</b>	Master of Engineering (Geomatics)