

ENGM90013 Strategy Execution for Engineers

Credit Points:	12.5
Level:	9 (Graduate/Postgraduate)
Dates & Locations:	2015, Parkville This subject commences in the following study period/s: Semester 1, Parkville - Taught on campus. Semester 2, Parkville - Taught on campus.
Time Commitment:	Contact Hours: 36 hours normally delivered as 1 x 3 hour lecture/tutorial per week Total Time Commitment: Estimated 200 hours
Prerequisites:	Admission into one of the following streams of the MC-ENG Master of Engineering: Master of Engineering (Chemical with Business), Master of Engineering (Civil with Business), Master of Engineering (Mechanical with Business), Master of Engineering (Electrical with Business), Master of Engineering (Software with Business)
Corequisites:	None
Recommended Background Knowledge:	None
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 emphasises the critical nature of Operations Management as an essential part of a competent engineer's portfolio of knowledge and skills.</p> <p>INDICATIVE CONTENT</p> <p>Topics include:</p> <ul style="list-style-type: none"> # Clarifying how the core concepts of operations management (including both processes and projects) help organisations achieve sustainable competitive advantage # Managing the integration of technology, people, functions and operating systems to support the complex processes underlying the development and manufacture of products and the creation and delivery of services # How organisations develop their core processes and project management capabilities and manage through them and how new technologies alter their design and performance. Relevant issues include process ownership, project management skills, teamwork, stakeholder management and communication, performance measurement and change management concepts.

Learning Outcomes:	<p>INTENDED LEARNING OUTCOMES (ILOs)</p> <p>This subject aims to highlight the skills and competencies needed by engineers to ensure their ongoing contribution to an organisation's operations and competitive position. These include:</p> <ol style="list-style-type: none"> 1 The role of Operations Management in various types of organisations and how leading organisations leverage this discipline as a sustainable source of competitive advantage 2 Project and process management models and frameworks 3 How to decompose and map an organisation's core processes along the value chain and understand the role of new technology in process management 4 The role and structure of performance measurement systems 5 Managing the human capital in organisations and the role of teams in operations management.
Assessment:	<p>Two group assignments consisting of 1500 words each (30% total, 15% each). Each assignment requires approximately 30-35hours of work (60-70 hours in total). Due in weeks 5 and 10 Individual class participation throughout semester (10%). Assessed throughout the semester Best five quizzes out of six (10 minutes each). Assessed every alternate week. (20% total, 4% each) Final three-hour end-of-semester examination (40%). Intended Learning Outcomes (ILO's) 1 to 5 are addressed in both group assignments, class participation, all quizzes and the exam Hurdle requirement: The examination must be passed to pass the subject</p>
Prescribed Texts:	<p>Managing Processes, Customised book prepared by Kannan Sethuraman and Gerardo Berbeglia, 2012, The University of Melbourne, McGraw-Hill Australia Pty Ltd.,</p>
Breadth Options:	<p>This subject is not available as a breadth subject.</p>
Fees Information:	<p>Subject EFTSL, Level, Discipline & Census Date, http://enrolment.unimelb.edu.au/fees</p>
Generic Skills:	<p>On completion of this subject, students should:</p> <ul style="list-style-type: none"> # Have an awareness of how business functions can be systematically integrated with strategic objectives by focusing on the provision of value to customers. # Be able to assume a supporting role in managing projects and processes in organisations of all types including technology intensive organisations. # Understand how change management programs can be integrated into an organisational wide improvement and performance management framework. # Be able to identify the fundamental drivers of sustainable organisational excellence. # Have the capacity to engage with current issues of significance in business and management. # Have an in-depth understanding of the importance and nature of performance measurement systems.
Notes:	<p>LEARNING AND TEACHING METHODS</p> <p>The subject is delivered through lectures, tutorials, case studies and workshop sessions.</p> <p>INDICATIVE KEY LEARNING RESOURCES</p> <p>Students are provided with lecture slides, case studies, tutorial materials and solutions.</p> <p>CAREERS / INDUSTRY LINKS</p> <p>Exposure to the tolls and techniques that prepare graduate engineers for leadership roles in operations management and business improvement.</p>
Related Majors/Minors/ Specialisations:	<p>Master of Engineering (Biomedical with Business) Master of Engineering (Chemical with Business) Master of Engineering (Civil with Business) Master of Engineering (Electrical with Business) Master of Engineering (Mechanical with Business) Master of Engineering (Software with Business)</p>