



MODULE SPECIFICATION

Part 1: Information			
Module Title	Engineering Management		
Module Code	UFMFTG-30-M	Level	Level 7
For implementation from	2019-20		
UWE Credit Rating	30	ECTS Credit Rating	15
Faculty	Faculty of Environment & Technology	Field	Engineering, Design and Mathematics
Department	FET Dept of Engin Design & Mathematics		
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations	None		
Co- requisites	None		
Module Entry requirements	None		

Part 2: Description
<p>Educational Aims: See Learning Outcomes</p> <p>Outline Syllabus: Communication management in an organisation: forms of communication, effective vs. ineffective communication, communication as a function of management, role of communications in motivation and leadership, team building, group behaviour, negotiation, and conflict management, barriers to good communication.</p> <p>Legal concepts: establishment of companies and introduction to business law; fundamentals of contract law; common types of contracts; contract documentation; labour law, legal responsibilities relating to product liability and professional negligence.</p> <p>Intellectual Property Rights: patents, trade secrets and copy rights; procedure for obtaining patents, copy rights and trademarks.</p> <p>Effects of Environmental Factors: The effects of extraneous factors on the operations of engineering organizations, such as ethics and corporate social responsibilities issues.</p> <p>Financial Management: Conduct and interpret managerial analyses of financial data of a business, use of finance and accounting in business decisions' sources of finance, ratio analysis</p>

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and presentation of financial information.

Engineering Economics: compare different investment alternatives based on quantitative methods, such as payback period, net present value (NPV), internal rate of return (IRR) methods and choose the best alternative, uncertainty in decision making and sensitivity analysis.

Teaching and Learning Methods: Overview: Large group lecture supported by tutorial group sessions. The tutorial sessions are designed to encourage the student to pragmatically develop their domain specific competences whilst simultaneously developing professional managerial and project management skills, under tutor guidance. Study time outside of contact hours will be spent working on the group project exercise.

Scheduled learning: Students receive guidance on team dynamics and form teams. The projects proceed in parallel with lectures, to guide student centred learning. Students will be required to operate within a set of guidelines which will mandate a professional standard of record keeping at the individual and team level. Teams will receive guidance and support during their team meetings held during the 2hr tutorials.

Independent learning: Much of the course work will be undertaken outside the supported sessions.

Hours

Contact 72

Assimilation and skill development 140

Undertaking coursework 40

Exam preparation 48

Total 300

NB Where students are engaged in this module through distance and work based learning contact will be replaced by engagement with electronic learning materials and suitable mentoring and e-learning support.

Part 3: Assessment

Your achievements in the module will be assessed in two components.

Component A consists of one assessment:

A: A three-hour written examination at the end of the semester.

Component B consists of three assessments:

B1: Individual assignment.

B2: Group presentation.

B3: Group assignment.

First Sit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B		20 %	Individual assignment
Presentation - Component B		10 %	Group presentation
Group work - Component B		20 %	Group assignment
Examination - Component A	✓	50 %	Exam (180 minutes)

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Written Assignment - Component B		40 %	Individual assignment
Presentation - Component B		10 %	Individual Presentation
Examination - Component A	✓	50 %	Exam (180 minutes)

Part 4: Teaching and Learning Methods																	
Learning Outcomes	<p>On successful completion of this module students will achieve the following learning outcomes:</p> <table border="1"> <thead> <tr> <th>Module Learning Outcomes</th> <th>Reference</th> </tr> </thead> <tbody> <tr> <td>Develop necessary skills for effective communication in an engineering organization so as to perform the basic functions of management, i.e., planning, organising, directing and controlling.</td> <td>MO1</td> </tr> <tr> <td>Ability to implement organizational strategies in the light of legal, regulatory, economic, social, and political contexts of a business.</td> <td>MO2</td> </tr> <tr> <td>Understanding of the ethical issues in engineering and demonstrate a personal and professional commitment to society and the environment.</td> <td>MO3</td> </tr> <tr> <td>Conduct and interpret managerial analyses of a range of financial data for business.</td> <td>MO4</td> </tr> <tr> <td>Understand the concepts of investment analysis and time value of money, compare different investment alternatives, recognize the uncertainty in decision making and assess how sensitive the results are to variations in different parameters.</td> <td>MO5</td> </tr> </tbody> </table>	Module Learning Outcomes	Reference	Develop necessary skills for effective communication in an engineering organization so as to perform the basic functions of management, i.e., planning, organising, directing and controlling.	MO1	Ability to implement organizational strategies in the light of legal, regulatory, economic, social, and political contexts of a business.	MO2	Understanding of the ethical issues in engineering and demonstrate a personal and professional commitment to society and the environment.	MO3	Conduct and interpret managerial analyses of a range of financial data for business.	MO4	Understand the concepts of investment analysis and time value of money, compare different investment alternatives, recognize the uncertainty in decision making and assess how sensitive the results are to variations in different parameters.	MO5				
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Reading List	<p>The reading list for this module can be accessed via the following link:</p> <p>https://uwe.rl.talis.com/index.html</p>																

Part 5: Contributes Towards
This module contributes towards the following programmes of study: