

#### **MODULE SPECIFICATION**

Part 1: Information			
Module Title	Engineering Management		
Module Code	UFMFTG-30-M Level 7		Level 7
For implementation from	2018-19		
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		
Contributes towards			
Module type:	Standard		
Pre-requisites	None		
Excluded Combinations None			
Co- requisites None			
Module Entry requireme	Entry requirements None		

### Part 2: Description

Educational Aims: See Learning Outcomes

**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.

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.

Intellectual Property Rights: patents, trade secrets and copy rights; procedure for obtaining patents, copy rights and trademarks.

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Effects of Environmental Factors: The effects of extraneous factors on the operations of engineering organizations, such as ethics and corporate social responsibilities issues.

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 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

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Group work - Component B		20 %	Group assignment
Examination - Component A	✓	50 %	Exam (180 minutes)
Resit Components	Final Assessment	Element weighting	Description
Written Assignment - Component B		40 %	Individual assignment
Presentation - Component B		10 %	Individual Presentation
Examination - Component A	✓	50 %	Exam (180 minutes)

	Part 4: Teach	ing and Learning Methods				
Learning Outcomes	On successful completion of this module students will be able to:					
	Mo	odule Learning Outcomes				
	MO1 De en	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.				
	MO2 Ab	Ability to implement organizational strategies in the light of legal, regulatory, economic, social, and political contexts of a business.				
	MO3 Un	iderstanding of the ethical issues in monstrate a personal and professind the environment.	n engineering and			
	MO4 Co	onduct and interpret managerial an ancial data for business.	alyses of a range of			
MO5 Underst of mone the unce		Inderstand the concepts of investment analysis and time value of money, compare different investment alternatives, recognize he uncertainty in decision making and assess how sensitive the esults are to variations in different parameters.				
Contact lours	Contact Hours					
	Independent Study Hours:					
	Independent study/self-gu	iided study	228			
		Total Independent Study Hours:	228			
	Scheduled Learning and Teaching	Hours:				
	Face-to-face learning		72			

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	Total Scheduled Learning and Teaching Hours:	72	
	Hours to be allocated	300	
	Allocated Hours	300	
Reading List	The reading list for this module can be accessed via the following link:		
	https://uwe.rl.talis.com/index.html		