



University of the
West of England

PROGRAMME SPECIFICATION

Part 1: Information		
Awarding Institution	University of The West of England	
Teaching Institution	University of The West of England	
Delivery Location	Frenchay	
Study abroad / Exchange / Credit recognition		
Faculty responsible for programme	Environment and Technology	
Department responsible for programme	Engineering Design and Mathematics	
Professional Statutory or Regulatory Body Links		
Highest Award Title	MSc Engineering Business Management	
Default Award Title		
Interim Award Titles	PG Diploma Engineering Business Management PG Certificate Engineering Business Management	
UWE Progression Route		
Mode of Delivery	Full Time.	
ISIS code/s	UCAS:	JACS:
	ISIS: H9N212	HESA:
For implementation from	September 2017	

Part 2: Description

This postgraduate degree is designed to provide access to employment with high earning potential in a professional engineering environment and is accessible to graduates from engineering or business disciplines. Through deepening the students understanding of the discipline of engineering and business management, and focusing on the application of knowledge in a real-world context, this programme is particularly relevant to the needs of organisations operating in the technology and engineering sectors.

The programme brings together expertise from both the Faculty of Environment and Technology and the Faculty of Business and Law. In addition, students will be provided with the opportunity to develop their skills and employability through interaction with external speakers from industry and through developing high-level skills in critical problem solving, analytics, critical thinking, oral and written communication.

Graduates of MSc Engineering Business Management programme will be equipped to access employment in a wide variety of professional contexts, and/or to commence doctoral level study. Engineering and technology managers are employed throughout the economy, for example; *Operations Manager, Business Consultant, Business Analyst, Engineering Project Manager, Supply Chain Consultant, Trade Analyst, Product Manager, Applications Engineer and production manager.*

The Engineering Business Management programme aims to:

- Provide opportunities for graduates from a range of backgrounds to develop themselves to meet the industry need for future managers who have both a mix of technology and business skills and knowledge within the engineering and technology sector;
- Provide a multi-disciplinary learning environment that will enable graduates to develop managerial capabilities and vision to face the challenges of the future, through engagement with academic expertise. Their understanding of real-world business practice will be enhanced through seminars delivered by experienced external speakers;
- Support graduates to gain a comprehensive understanding of global challenges, in order to respond with change initiatives and strategies that strengthens organisation competitiveness;
- Prepare graduates for progression to study doctoral degrees in engineering business management research;
- Develop critical thinking, problem-solving transferable and continuous learning skills that will be valuable to graduates in their employability and in accelerating their career progression.
- Provide appropriate facilities and resources from both the Faculty of Environment and Technology and the Faculty of Business and Law to deliver a high-quality teaching and learning experience for students, as appropriate.

Programme requirements for the purposes of the Higher Education Achievement Record (HEAR)

The programme is aimed at postgraduate students who are able to apply their professional management knowledge and skills in an engineering and technology context.

A successful graduate will be highly strategic and able to provide leadership in the way they articulate their knowledge in the context of 21st century global challenges facing multinational organisations and SMEs. On completion, graduates will have experienced individual and group projects, demonstrating an ability to work independently and in a team. Graduates will be professionals who understand their strengths and able to work across different business cultures and manage complex projects.

Regulations

Approved to [University Regulations and Procedures](#)

Part 3: Learning Outcomes of the ProgrammeA. Knowledge and Understanding (subject specific)

1. Interpret and critically evaluate the contribution of innovation, technology, leadership, and system thinking in responding to dynamic changes in the technology and engineering business environment
2. Apply business and management techniques to address realistic technology/engineering challenges drawn from a variety of real-world application.
3. Understand the nature of conflict in a multi-functional technology business environment. Balancing operational objectives with organisational priorities and maintaining a clear “line of sight” to the customer needs and their perception of value.
4. Demonstrate strategic management thinking and critical examination of business recommendations and decisions in various functions and contexts for sustainable competitiveness of an engineering/technology business.
5. Demonstrate inclusive knowledge and understanding of the key management theories, models and frameworks required for managers in the technology and engineering sector.
6. Assimilate and apply multi-disciplinary knowledge to tackle current organisational, industrial and/or global challenges.

B. Intellectual Skills (generic)

1. Develop enhanced practical skills in the management of technology and engineering business capabilities
2. Develop leadership characteristics to advise on strategic operational and management issues for engineering and technology firms.
3. Analyse recent developments in engineering/technology industry and their strategic operation and management impacts
4. Critically evaluate information and demonstrate effective decision-making based on the outcomes evaluation
5. Translate real-world challenges into relevant business intelligence with clear vision for the route of creating new capabilities to increase/enhance competitiveness to safeguard long-term success.

C. Subject/Professional/Practical Skills (subject specific)

1. Apply technology and business management skills/knowledge to complex and unfamiliar problems situations and to provide effective recommendations to multidisciplinary problems.
2. Apply both management and engineering concepts, ideas and theories in a variety of contexts such as operation strategy, technology innovation, project management, and strategic decision making.
3. Use professional management language, frameworks and methods in the description and analysis of technology and engineering

Part 3: Learning Outcomes of the Programme

application and problems;

4. *Demonstrate effective professional team skills and receive feedback from peers in order to achieve mutual goals.*
5. *Acknowledge others' perspectives, experience, creativity, and contributions to problems and be able to debate, adopt and adapt to external knowledge and information.*
6. *Analyse data, use technology and business information in a real-world context in order to develop appropriate business solutions.*

D. Transferable Skills and other attributes (generic)

1. *Communicate effectively using professional English, both orally and through written reports*
2. *Demonstrate the ability to effectively manage oneself and time to deliver agreed outcomes and meet deadlines*
3. *Deliver a substantial individual project and exercise decision making seeking practical recommendations where application of knowledge is essential to optimal solutions for multifaceted problem*
4. *Work in multidisciplinary teams and take responsibility for individual and shared objectives, understanding the benefits and complications inherent within team working*
5. *Take a logical and systematic approach to problem formulation, solution and decision making*
6. *Demonstrate the ability to learn independently and embrace the concept of life-long learning*
7. *To be able to critically review available professional and academic literature that is relevant to the subject discipline and use this to enhance understanding of their discipline*
8. *To be able to communicate professional and academic requirements in a manner that is meaningful to all relevant levels and functions in the real-world context*

Part 3: Learning Outcomes of the Programme								
		UMAD47-15-M Managing Finance	UMKCQT-15-M Meeting Customer Needs	UFMFJM-15-M Process Design and Management	UFMF77-15-M Engineering Project Management	UFMF78-15-M Strategic Analysis of Technical Operations	UFMFBM-30-M Engineering Management for Global Challenges	UFMFTF-60-M Postgraduate Dissertation
Learning Outcomes:								
A) Knowledge and understanding of:								
1 Interpret and critically evaluate the contribution of innovation, technology, leadership, and system thinking in responding to dynamic changes in the technology and engineering business environment						X	X	X
2 Apply business and management techniques to address realistic technology/engineering challenges drawn from a variety of real-world application.					X	X	X	X
3 Understand the nature of conflict in a multi-functional technology business environment. Balancing operational objectives with organisational priorities and maintaining a clear "line of sight" to the customer needs and their perception of value.			X	X				X
4 Demonstrate strategic management thinking and critical examination of business recommendations and decisions in various functions and contexts for sustainable competitiveness of an engineering/technology business.						X	X	
5 Demonstrate inclusive knowledge and understanding of the key management theories, models and frameworks required for managers in the technology and engineering sector.	X			X		X	X	
6 Assimilate and apply multi-disciplinary knowledge to tackle current organisational, industrial and/or global challenges.						X	X	X
(B) Intellectual Skills								
1 Develop enhanced practical skills in the management	X				X			X

Part 3: Learning Outcomes of the Programme									
	4 Work in multidisciplinary teams and take responsibility for individual and shared objectives, understanding the benefits and complications inherent within team working				X	X	X		
	5 Take a logical and systematic approach to problem formulation, solution and decision making				X	X	X	X	
	6 Demonstrate the ability to learn independently and embrace the concept of life-long learning							X	
	7 To be able to critically review available professional and academic literature that is relevant to the subject discipline and use this to enhance understanding of their discipline						X	X	
	8 To be able to communicate professional and academic requirements in a manner that is meaningful to all relevant levels and functions in the real-world context					X	X	X	

Part 4: Programme Structure

This structure diagram demonstrates the student journey from Entry through to Graduation for a typical **full time undergraduate student** including:

- level and credit requirements
- interim award requirements
- module diet, including compulsory and optional modules

ENTRY	Compulsory Modules	Optional Modules:	Awards
Year 1	<ul style="list-style-type: none"> • UFMFBM-30-M Engineering Management for Global Challenges • UMAD47-15-M Managing Finance • UMKCQT-15-M Meeting Customer Needs • UFMF78-15-M Strategic Analysis of Technical Operations • UFMF77-15-M Engineering Project Management • UFMFJM-15-M Process Design and Management • UFMFTF-60-M Postgraduate Dissertation 	15 credits from: <i>(subject to availability)</i> <ul style="list-style-type: none"> • UFMF74-15-M Advanced Manufacturing • UFMEE8-15-M Principles of Lean Engineering • UMOCB3-15-M Managing Change 	Interim awards: Certificate of Higher Education Engineering Business Management 60 credits of which must include: UFMF78-15-M UFMF77-15-M UMAD47-15-M Postgraduate Diploma of Higher Education Engineering Business Management 120 credits of which must include: UFMF78-15-M UFMF77-15-M UMAD47-15-M UFMFBM-30-M

Part time:

The programme is not offered part-time

Part 5: Entry Requirements

The University's Standard Entry Requirements apply:

We normally require a honours degree at 2:2 or above in an engineering, science or business related discipline.

We would strongly encourage applicants who do not meet the normal entry requirement, but who do have relevant qualifications or professional experience to apply. Such applicants will be considered on a case by case basis. In your application, you should describe in detail your professional experience and qualifications.

Part 6: Reference Points and Benchmarks

Set out which reference points and benchmarks have been used in the design of the programme:

[QAA UK Quality Code for HE](#)

- Framework for higher education qualifications (FHEQ)
- Subject benchmark statements
- Qualification characteristics for [Foundation degrees](#) and [Master's degrees](#)

[QAA Subject Benchmark statement for Engineering \(2015\)](#)

[QAA Subject Benchmark statement for Business and Management \(2015\)](#)

[Strategy 2020](#)

[University policies](#)

Staff research projects

Any relevant PSRB requirements

Any occupational standards

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First CAP Approval Date	30 May 2017			
Revision CAP Approval Date <i>Update this row each time a change goes to CAP</i>		Version	1	Link to MIA (ID 3809)
Next Periodic Curriculum Review due date	May 2023			
Date of last Periodic Curriculum Review				