Aston University

PROGRAMME SPECIFICATION
(2014-15)

Programme Title	Engineering Management
UCAS/JACS Code	
School/Subject Area	School of Engineering and Applied Science
Final Award	MSc
Interim Award(s)	Postgraduate Certificate, Postgraduate Diploma
Mode(s) of Study	Full-time and part-time on campus
Normal Length of Programme	FT: 12 months PT: 24 months minimum
Total Credits	Certificate 60, Diploma 120, MSc 180
Programme Accredited By	Chartered Management Institute
Dates Programme Specification Written and Revised	01/07/06, 1/07/07, 01/07/08, 1/09/09, 01/10/10, 21/9/11, September 2014

Educational Aims of the Programme	To develop the management and leadership skills of practising engineers. Particular emphasis is placed on taking a strategic view of business and how, most effectively, to work with and lead a diverse range of people who represent the business stakeholders. The course aims to enable the students to define better their roles in an engineering business, particularly in the areas of manufacturing and new product development, and to make an effective transition from being a technical specialist to becoming a managerial leader. The MSc Project will provide an opportunity for the students to link the taught modules to a practical issue; where possible, through industrially-linked projects. To ensure relevance by maintaining and enhancing the University's links with business, professional and public sector organisations. To enhance lifelong learning skills and personal development to enable students to work with self-direction and contribute to business and society at large. To be regarded as one of the top 10% of postgraduate programmes in the UK.

Relevant Subject Benchmark Statements and other current External and Internal Strategies, Policies or Research used to inform programme outcomes	• Quality Assurance Agency (QAA) Benchmarking Statement in Business and Management for Masters level programmes • UK Quality Code Part A.1 (2011) • Quality Assurance Agency (QAA) Codes of Practice • Mapping against the Chartered Management Institute Diploma in Strategic Management and Leadership has informed development of the programme

TAUGHT STAGE

Programme Structures and Requirements: Levels, Modules and Credits						
Module Title	Credits	Level	Module Code	Core/Option	Condoneable Y/N	Pre-requisite(s) Y/N
Strategic Finance	10	7	EM4001	Core	Y	N
Strategic Management	10	7	EM4002	Core	Y	N
Project Management	10	7	EM4003	Core	Y	N
Management of Change	10	7	EM4005	Core	Y	N
Product Introduction Process	15	7	EM4006	Core	Y	N
Lean and Agile Manufacture	10	7	EM4007	Core	Y	N
Human Resource Management	10	7	EM4012	Core	Y	N
Research Methods	15	7	EM4019	Core	Y	N
Corporate Social Responsibility	10	7	EM4022	Core	Y	N
Management in Engineering Enterprises	20	7	EM4023	Core	Y	N
TOTAL	120					

DISSERTATION STAGE

Programme Structures and Requirements: Levels, Modules and Credits						
Module Title	Credits	Level	Module Code	Core/Option	Condoneable Y/N	Pre-requisite(s) Y/N
Dissertation	60	7	EM4020	Core	N	Y
TOTAL	60					

Programme Outcomes, Learning and Teaching and Assessment Strategies			
A. <u>Knowledge and Understanding</u>			
	On successful completion of their programme, students are expected to have knowledge and understanding of:	Learning, Teaching and Assessment Strategies to enable outcomes to be achieved and demonstrated	
		Learning and Teaching Methods	Assessment Methods
1	Strategic decision-making/policy and practice in the context of the business environment locally, nationally and internationally	Lectures: • convey essential knowledge • provide guidance to students on effective use of learning materials Case Studies To make connections with real life scenarios Guest Lectures	Examinations: • to assess learning outcome • to test students' ability to marshal information concisely and accurately within a limited time Written assignments: Essays and Reports • to assess learning outcomes • to assess ability to marshal information and present an
2	The contribution of wider aspects of business areas, to be able to integrate engineering strategy / policy and practice with business and organisational strategy.		
3	Theoretical and applied perspectives of Engineering Management		

4	Specific areas of engineering management through the study of specialist modules. These areas include; projects, manufacturing, new product development, marketing and change management	To share experiences and link study with organisations Group Activities/Discussions To explore issues , share ideas and develop understanding Presentations To organise research materials and proposals, communicate outcomes and share understanding. Videos To 'bring to life' and help develop understanding of key issues	argument Presentations • to assess learning outcomes Learning journal to reflect on progress with developing knowledge and understanding
5	An appreciation of the importance of sustainability and corporate social responsibility in business today		

B. <u>Intellectual Skills</u>			
	On successful completion of their programme, students are expected to be able to:	Learning, Teaching and Assessment Strategies to enable outcomes to be achieved and demonstrated	
		Learning and Teaching Methods	Assessment Methods
1	Demonstrate a high level of intellectual and analytical skills, and, through intensive postgraduate study, have acquired and developed understanding of Engineering Management subjects.	Tutorials: • to provide support to student learning • project supervision to help students develop research and analytical skills • Case studies to develop assessment, reasoning, decision making and problem solving skills	• project work to assess analytical and research skills • learning journal to reflect on progress with developing intellectual skills • Written assignments to assess range of intellectual skills
2	Demonstrate competence in synthesis, critical reasoning, evaluation and decision-making.		
3	Critically assess and engage with business and management problems within the engineering industry to develop problem solving skills.		

C. **Professional Skills**			
	On successful completion of their programme, students are expected to be able to:	Learning, Teaching and Assessment Strategies to enable outcomes to be achieved and demonstrated	
		Learning and Teaching Methods	Assessment Methods
1	Apply principles, models and theories in the working environment.	• Visiting speakers from industry who connect theoretical studies with practical experience • Case studies are used extensively to allow students to discuss real life scenarios • Role play is used to help students learn how to deal with real life scenarios	• Completion of workshops • Completion of learning journal recording examples of Continuous Professional Development.
2	Demonstrate practical skills in EM through active learning		
3	Demonstrate the knowledge and skills required for practitioners in EM e.g negotiating skills, planning skills, presentation, leading & influencing skills and consultancy skills.		

D. **Transferable Skills**			
	On successful completion of their programme, students are expected to show:	Learning, Teaching and Assessment Strategies to enable outcomes to be achieved and demonstrated	
		Learning and Teaching Methods	Assessment Methods
1	IT and computing skills	• Group working skills via case studies and syndicate group activities • Computer and IT skills • Research skills through individual modules and the final project. Within this planning, communication and time management skills	• Report writing assignments • Group and individual presentations (formatively and summatively assessed) • IT and quantitative skills assignments • Dissertation • Examinations using essays, case studies and short answer questions • Learning journal to reflect on development of transferable skills
2	Report writing skills		
3	Presentational skills		
4	Communication and team working skills		
5	Competency in understanding relevant statistical analyses and financial reports		
6	Research skills		
7	Enhanced personal skills and self-confidence in order to optimise career prospects.		
8	Ability to apply and integrate their key skills and competencies by undertaking a work based dissertation		

Entry Requirements	**Direct Entry:** • A minimum 2:2 UK honours degree or an overseas degree recognised by Aston or • A degree-equivalent professional qualification • Candidates with other qualifications and experience may be considered on merit. The degree should be in an engineering or technical subject or be a business degree with a high level of quantitative skills **English Language Requirements (for candidates whose first language is not English):** • Evidence that an Undergraduate degree was taught mainly or entirely in English or • A TOEFL score of at least 600 (paper-based with TWE of 4.5) or 250 (computer-based with TWE of 4.5) or 100 (internet-based with minimum 23 in writing and speaking and 20 in reading and listening). • An IELTS score of 6.5 overall with no less than 6.5 in writing and speaking and 6.0 in listening and reading. • Candidates with TOEFL 580 (paper-based with TWE of 4.0), 237 (computer-based with TWE of 4.0) or 92 (internet-based with 22 minimum in writing) or above, or IELTS 6.0 overall with no less than 6 in writing and speaking and 5.5 in listening and reading may be admitted subject to attendance at and satisfactory performance in a 6 week pre-sessional course. • Candidates with TOEFL 560 (paper-based with TWE of 3.5), 220 (computer-based with TWE of 3.5) or 83 (internet-based with minimum 21 in writing) or above, or IELTS 5.5 overall and no less than 6.0 in writing and 5.0 in any other section may be admitted subject to attendance at and satisfactory performance in a 10 week pre-sessional course. • Candidates with TOEFL 540 (paper-based with TWE of 3.0), 207 (computer-based with TWE of 3.0) or 76 (internet-based with minimum 20 in writing) or above, or IELTS 5.5 overall and no less than 5.0 in any sectiond may be admitted subject to attendance at and satisfactory performance in a 15 week pre-sessional course. • A GMAT of 550 minimum may be required

Programme Regulations	**Attendance requirements:** The course has a duration of 12 months full-time or up to 3 years part-time. Students are required to attend all sessions as specified for the course. **Requirements for the award of qualifications:** A student enrolled for the Diploma or Certificate may apply for transfer to the Masters programme once 4 modules have been completed at a standard which meets the requiren of the Masters programme **Examination of Dissertation** All dissertations are examined by the supervisor and a second examiner. Where necessary, a third person will be asked to moderate. In cases where the final mark cannot be agreed upon by the supervisor and other marker(s), the student may be required to be examined by viva voce. Additionally, if there are any queries about the authenticity of the data, or any issues with regards to academic practice and standards within the Dissertation, students may be required to be examined by viva voce. In such cases the viva voce will be conducted by the supervisor, and an additional examiner (as appointed by the Dissertation Module Owner). It will be chaired by the Group Head or appointee.
General Regulations (http://www1.aston.ac.uk/registry/for-staff/regsandpolicies/general-regulations/) and the Regulations for the programme (above) take precedence over other information sources such as student handbooks if there is a conflict. If there is a conflict between General Regulations and Programme Regulations then General Regulations take precedence unless an exemption has been approved.	

This specification provides a concise summary of the main features of the programme and the threshold learning

outcomes that a student might normally be expected to achieve and demonstrate if they take full advantage of the learning opportunities that are provided. **The individual modules included in the programme may differ from those listed in this programme specification as our programmes as our programmes are continuously reviewed.** Information on admissions requirements and career opportunities is available in the relevant prospectus. More detailed information on the learning outcomes, content and teaching, learning and assessment methods of each module can be found in the appropriate module specifications and programme handbook(s) which are available to students on enrolment.