

#### **KEY PROGRAMME INFORMATION**

Originating institution(s) Bournemouth University	Faculty responsible for the programme Faculty of Science and Technology				
Final award(s), title(s) and credits  MSc Engineering Project Management –180 (90 ECTS) Level 7 credits					
Intermediate award(s), title(s) and cree PGDip Engineering Project Managemen PGCert Engineering Project Management	ent - 120 (60 ECTS) Level 7 credits				
UCAS Programme Code(s) (where applicable and if known) NA	HECoS (Higher Education Classification of Subjects) Code and balanced or major/minor load				
	100184 (40%), 100182 (40%), 100048 (20%)				

#### **External reference points**

UK Quality Code for Higher Education;

Part A: Part A: Setting and Maintaining Academic Standards;

Chapter A1: UK and European reference points for academic standards (October 2013) - incorporates the Frameworks for Higher Education Qualifications of UK Degree-Awarding Bodies (Qualification Frameworks), Foundation Degree qualification benchmark, Master's Degree Characteristics and Subject Benchmark Statements:

Subject benchmark statements - Engineering (2015);

Subject benchmark statements - Business and Management (2015)

Masters level benchmark statements - Masters Degrees in Business and Management (2015)

# Professional, Statutory and Regulatory Body (PSRB) links

Not applicable

## Places of delivery

12/15 Months full-time 24 months part-time

Bournemouth University, Talbot Campus

Mode(s) of delivery full-time/part-time	Language of delivery English	
Typical duration Programme duration:		

Date of first intake September 2022	Expected start dates September and January
Maximum student numbers Not applicable	Placements Not applicable
Partner(s) Not applicable	Partnership model Not applicable

## **Date of this Programme Specification**

September 2022

# Version number

Version 1.4-0923

# Approval, review or modification reference numbers

E20171854 BU 1819 01

FST 2021 01, Approved 06/11/2020 - Previously v1.1-0920

FST 2021 08 Approved 05/05/2021- Previously v1.2-0921

EC 2021 33

FST 2122 16, Approved 02/02/2022 - Previously v1.3-0921

#### **Author**

Dr	Mehran	Koohai	lani
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# PROGRAMME STRUCTURE

# Programme Award and Title: MSc Engineering Project Management

# Stage 1/Level 7

Students are required to complete 6 core units.

Unit Name	Core/ Option	No of credits	Assessment Element Weightings		Expected contact hours per unit	Unit version no.	HECoS Subj	ect Code	
			Exam 1	Cwk 1	Cwk 2				
Competitive Product Development	Core Common	20		100		31	v2.1	100048	
Design Management	Core Common	20		100		31	v2.1	100048 (major)	100075 (minor)
Project Management	Core Common	20		100		31	v2.1	100182	
Knowledge Transfer	Core Common	20		100		31	v2.1	100184	
Life Cycle Management	Core Common	20		100		31	v1.1	100048 (balanced)	100180 (balanced)
Research Methods	Core Common	20		100		31	v2.1	100962	

Progression requirements: Requires 120 credits at Level 7

#### **Exit qualification:**

PGCert Engineering Project Management requires 60 credits at Level 7. Student must pass two subject specific units (<a href="from">from</a> Competitive Product Development, Design Management, Project Management, Knowledge Transfer)
PgDip Engineering Project Management requires 120 credits at Level 7. Students must pass all taught units excluding the individual project.

Stage 2/Level 7 Students are required to complete the Individual Project.									
Unit Name	Core/ Option	No of credits	Assessment Element Weightings		Expected contact hours per	Unit version no.	HECoS Subject Code		
			Exam 1	Cwk 1	Cwk 2	unit			
Individual	Core	60		90	10	7.5	V2.2	100048	100184
Masters Project	Common							(balanced)	(balanced)
Exit qualification: MSc Engineering Project Management requires 180 credits at Level 7.									

#### AIMS OF THE DOCUMENT

The aims of this document are to:

- define the structure of the programme;
- specify the programme award titles;
- identify programme and level learning outcomes;
- articulate the regulations governing the awards defined within the document.

#### AIMS OF THE PROGRAMME

This programme aims to develop creative, innovative and resourceful graduates, who:

- understand project management methods and tools, and are able to employ them in the planning and execution of projects;
- are fully aware of engineering design methods and tools available and investigate, select and learn to employ those appropriate to the needs of their industries;
- are fully conversant with contemporary information resources and use them effectively and efficiently;
- are able to document and communicate, using oral and written presentations, project plans and results;
- have a critical understanding how sustainability impacts the management of the engineering management process;
- are able to plan, conduct and report on small engineering research projects.

The MSc Engineering Project Management programme aims to provide the candidate with the ability to plan and efficiently manage new technology projects, using modern methods and tools. In recent years there have been significant developments in the philosophies, methods and tools for planning and executing projects. These developments are particularly important to industries engaged in developing new products, systems or capabilities. This programme is designed to provide industry with personnel who understand and can employ management and technical tools, and are able to spearhead and manage the development of new products and projects appropriate for the technological industries. This programme will be of particular relevance to Knowledge Transfer Partnership Associates engaged in the engineering and manufacturing sectors.

## ALIGNMENT WITH THE UNIVERSITY'S STRATEGIC PLAN

The MSc Engineering Project Management programme is informed by and aligned with Bournemouth University's 2012-18 strategic plan and the fusion of excellent teaching, world-class research and professional practice that is at the heart of the institution's visions and values. Students are supported by academics with a wealth of industry experience, many of whom are actively engaged with national professional engineering institutions. Academics delivering the programme are actively engaged in cutting edge research and consultancy projects, while students are encouraged to participate in a range of co-creation and co-publication projects. The programme's innovative pedagogic approach offers students the opportunity to learn by engaging in a series of practical, industry focused projects. These projects are aimed at equipping students with the full range of skills necessary to succeed in an innovative engineering environment, and are informed by the academic team's own industrial experience as well as by a network of industry contacts, who may also contribute directly to the programme by delivering guest lectures and providing opportunities for industrial visits.

# **LEARNING HOURS AND ASSESSMENT**

Bournemouth University taught programmes are composed of units of study, which are assigned a credit value indicating the amount of learning undertaken. The minimum credit value of a unit is normally 20 credits, above which credit values normally increase at 20-point intervals. 20 credits is the equivalent of 200 study hours required of the student, including lectures, seminars, assessment and independent study. 20 University credits are equivalent to 10 European Credit Transfer System (ECTS) credits.

The assessment workload for a unit should consider the total time devoted to study, including the assessment workload (i.e. formative and summative assessment) and the taught elements and independent study workload (i.e. lectures, seminars, preparatory work, practical activities, reading, critical reflection).

Assessment per 20 credit unit should normally consist of 3,000 words or equivalent. Dissertations and Level 6 and 7 Final Projects are distinct from other assessment types. The word count for these assignments is 5,000 words per 20 credits, recognising that undertaking an in-depth piece of original research as the capstone to a degree is pedagogically sound.

## STAFF DELIVERING THE PROGRAMME

Students will usually be taught by a combination of senior academic staff with others who have relevant expertise including – where appropriate according to the content of the unit – academic staff, qualified professional practitioners, demonstrators/technicians and research students.

# INTENDED LEARNING OUTCOMES - AND HOW THE PROGRAMME ENABLES STUDENTS TO ACHIEVE AND DEMONSTRATE THE INTENDED LEARNING OUTCOMES

# PROGRAMME INTENDED OUTCOMES

	Note to the sound of the sound of the second	The falls for board and
This	Subject knowledge and understanding s programme provides opportunities for students to elop and demonstrate knowledge and understanding of:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:
<b>A</b> 1	the reasons for, and benefits and disadvantages of, Knowledge Transfer;	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):
A2	the global context and in particular low-cost manufacturing issues and import / export opportunities;	<ul> <li>independent research (for project) (A1-A7);</li> </ul>
А3	modern computer tools for product design, evaluation and manufacture, and of their place and role in the various stages of product development;	• lectures (A1-A7);
A4	the implications of design management decisions;	• seminars (A1–A7);
<b>A5</b>	methodology, research planning, and experiment design	practical tutorials (A3, A7);
	and analysis techniques;	directed reading (A1-A7);
A6	selection and application of different techniques used in the management and control of projects, with special emphasis on project management;	• use of the VLE (A1-A7).
Α7	life cycle assessment and influencing sustainable development within the design process.	Assessment strategies and methods (referring to numbered Intended Learning Outcomes):
		• individual project (A1-A7);
		• coursework (A1–A7).
	ntellectual skills	The following learning and teaching and assessment strategies and methods
This	s programme provides opportunities for students to:	enable students to achieve and to demonstrate the programme outcomes:
B1	to identify and fully analyse the stages in the product development and life cycle, in terms of time and resources;	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):
B2	gain critical understanding of IPR mechanisms and have the ability to critically evaluate innovation drivers;	independent research (for project)     (B1- B7);
В3	critically evaluate decision making techniques to aid management judgement;	• group exercises (B3, B4, B6);
В4	identify appropriate sources of information and evaluate them critically in terms of reliability and relevance to a particular topic;	<ul> <li>directed reading (B1- B7);</li> <li>use of the VLE (B1-B7).</li> <li>Assessment strategies and methods</li> </ul>
B5	engage in analytical and critical thinking with respect to the planning of engineering design and development projects;	(referring to numbered Intended Learning Outcomes):  • individual project (B1-B7);

B6	quantify the environmental impact of a product/system through Life Cycle Analysis techniques;	coursework (B1–B7).
В7	deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data.	
C: F	Practical skills	The following learning and teaching and
This	s programme provides opportunities for students to:	assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:
C1	apply expertly a number of different techniques used in the management and control of projects;  be able to apply typical product/service lifecycle	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):
	scenarios to a project at the initial concept stage.	individual project (C1-C2);
		practical tutorials (C1, C2);
		• seminars (C1-C2);
		use of the VLE (C1-C2).
		Assessment strategies and methods (referring to numbered Intended Learning Outcomes):
		individual project (C1-C2);
		• coursework (C1–C2).
D: 1	ransferable skills	The following learning and teaching and
This	s programme provides opportunities for students to:	assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:
D1	demonstrate problem solving skills and the application of knowledge across the discipline areas;	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):
D2	gather, select, and analyse a range of experimental and fieldwork data and present professionally using appropriate media;	lectures (D1-D3);
D3	distil, synthesise and critically analyse alternative	individual project (D1-D6);
<b>D</b> 3	approaches and methodologies to problems and research results reported in literature and elsewhere;	• seminars (D1-D6);
D4	demonstrate initiative, self-direction and exercise	• use of the VLE (D1 – D6).
	personal responsibility for management of own learning;	Assessment strategies and methods (referring to numbered Intended
D5	work autonomously and become reflective learners;	Learning Outcomes):
D6	communicate effectively and confidently to appropriate professional and academic standards.	individual projects (D1-D6);
		coursework (D1–D6).

# PGDip INTENDED OUTCOMES

The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:
Antages of, Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):
ost opportunities;  n, evaluation role in the lectures (A1-A7);  • seminars (A1-A7);
• practical tutorials (A3);
<ul><li>directed reading (A1-A7);</li><li>use of the VLE (A1-A7).</li></ul>
niques used in with special  Assessment strategies and methods (referring to numbered Intended Learning Outcomes):
• coursework (A1–A7).
The following learning and teaching and assessment strategies and methods
enable students to achieve and to demonstrate the programme outcomes:
the product me and Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):
nisms and have drivers; • group exercises (B3, B4);
<ul><li>directed reading (B1- B5);</li><li>use of the VLE (B1-B5).</li></ul>
Assessment strategies and methods (referring to numbered Intended Learning Outcomes):
with respect to evelopment • coursework (B1–B5).
The following learning and teaching and assessment strategies and methods
enable students to achieve and to demonstrate the programme learning outcomes:
Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):
de at we have the contract of

		practical tutorials (C1);
		seminars (C1);
		use of the VLE (C1).
		Assessment strategies and methods (referring to numbered Intended Learning Outcomes):
		coursework (C1).
	ransferable skills s programme provides opportunities for students to:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:
D1	demonstrate problem solving skills and the application of knowledge across the discipline areas;	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):
D2	gather, select, and analyse a range of experimental and fieldwork data and present professionally using appropriate media;	lectures (D1-D3);
D3	distil, synthesise and critically analyse alternative approaches and methodologies to problems and research results reported in literature and elsewhere;	<ul><li>seminars (D1-D6);</li><li>use of the VLE (D1 – D6).</li></ul>
D4	demonstrate initiative, self-direction and exercise personal responsibility for management of own learning;	Assessment strategies and methods (referring to numbered Intended Learning Outcomes):
D5	work autonomously and become reflective learners;	
D6	communicate effectively and confidently to appropriate professional and academic standards.	coursework (D1–D6).

# **PGCert INTENDED OUTCOMES**

This	Subject knowledge and understanding sprogramme provides opportunities for students to elop and demonstrate knowledge and understanding of:	The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:		
A1 A2	the reasons for, and benefits and disadvantages of, Knowledge Transfer; the global context and in particular low-cost manufacturing issues and import / export opportunities;	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):  • lectures (A1-A5);		
А3	modern computer tools for product design, evaluation and manufacture, and of their place and role in the various stages of product development;	<ul><li>seminars (A1–A5);</li><li>practical tutorials (A3);</li></ul>		
A4	the implications of design management decisions;	<ul><li>directed reading (A1-A5);</li><li>use of the VLE (A1-A5).</li></ul>		

A5	selection and application of different techniques used in the management and control of projects, with special emphasis on project management.	Assessment strategies and methods (referring to numbered Intended Learning Outcomes):  • coursework (A1–A5).
B: I	ntellectual skills	The following learning and teaching and assessment strategies and methods
	programme provides opportunities for students to:	enable students to achieve and to demonstrate the programme outcomes:
B1	to identify and fully analyse the stages in the product development and life cycle, in terms of time and resources;	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):
B2	gain critical understanding of IPR mechanisms and have the ability to critically evaluate innovation drivers;	• group exercises (B3, B4);
В3	critically evaluate decision making techniques to aid	directed reading (B1- B5);
	management judgement;	use of the VLE (B1-B5).
B4	identify appropriate sources of information and evaluate them critically in terms of reliability and relevance to a particular topic;	Assessment strategies and methods (referring to numbered Intended Learning Outcomes):
B5	engage in analytical and critical thinking with respect to the planning of engineering design and development projects.	• coursework (B1–B5).
C: F	Practical skills	The following learning and teaching and assessment strategies and methods
This	s programme provides opportunities for students to:	enable students to achieve and to demonstrate the programme learning outcomes:
C1	apply expertly a number of different techniques used in the management and control of projects.	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):
		practical tutorials (C1);
		seminars (C1);
		use of the VLE (C1).
		Assessment strategies and methods (referring to numbered Intended Learning Outcomes):
		coursework (C1).
D: 1	ransferable skills	The following learning and teaching and assessment strategies and methods
This	programme provides opportunities for students to:	enable students to achieve and to demonstrate the programme learning outcomes:
D1	demonstrate problem solving skills and the application of knowledge across the discipline areas;	Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):
		lectures (D1-D3);

D2	gather, select, and analyse a range of experimental and
	fieldwork data and present professionally using
	appropriate media;

- D3 distil, synthesise and critically analyse alternative approaches and methodologies to problems and research results reported in literature and elsewhere;
- **D4** demonstrate initiative, self-direction and exercise personal responsibility for management of own learning;
- **D5** work autonomously and become reflective learners;
- **D6** communicate effectively and confidently to appropriate professional and academic standards.

- seminars (D1-D6);
- use of the VLE (D1 D6).

Assessment strategies and methods (referring to numbered Intended Learning Outcomes):

coursework (D1–D6).

# **ADMISSION REGULATIONS**

The regulations for this programme are the University's Standard Postgraduate Admission Regulations (https://intranetsp.bournemouth.ac.uk/pandptest/3a-postgraduate-admissions-regulations.doc).

## ASSESSMENT REGULATIONS

The regulations for this programme are the University's Standard Postgraduate <u>Assessment Regulations</u>.

# **Programme Skills Matrix**

Units		Programme Intended Learning Outcomes																					
		Α	Α	Α	Α	Α	Α	Α	В	В	В	В	В	В	В	С	С	D	D	D	D	D	D
		1	2	3	4	5	6	7	1	2	3	4	5	6	7	1	2	1	2	3	4	5	6
L E V E L	Research Methods						Х					Х	Х		Х	Х		Х	Х	Х	Х	Х	Х
	Competitive Product Development	х		х					х			х			х				х	х	х	Х	х
	Design Management				х		х			х		х			х				х	х	х	х	х
	Project Management						х				х	х	х		х	х			х	х	х	Х	х
	Knowledge Transfer	х									х	х			х				х	х	х	Х	х
	Life Cycle Management							х				х		х	х		х		х	х	х	Х	х
	Individual Masters Project (60 credits)	х	х		х	х	х	х	х	х	х	х	х	х	х	х		х	х	х	х	Х	х

#### A - Subject Knowledge and Understanding

This programme provides opportunities for students to develop and demonstrate knowledge and understanding of:

- 1. the reasons for, and benefits and disadvantages of, Knowledge Transfer;
- 2. the global context and in particular low-cost manufacturing issues and import / export opportunities;
- modern computer tools for product design, evaluation and manufacture, and of their place and role in the various stages of product development;
- 4. the implications of design management decisions;
- 5. methodology, research planning, and experiment design and analysis techniques;
- 6. selection and application of different techniques used in the management and control of projects, with special emphasis on project management;
- 7. life cycle assessment and influencing sustainable development within the design process.

#### B - Intellectual Skills

This programme provides opportunities for students to:

- to identify and fully analyse the stages in the product development and life cycle, in terms of time and resources:
- gain critical understanding of IPR mechanisms and have the ability to critically evaluate innovation drivers;
- 3. critically evaluate decision making techniques to aid management judgement:
- 4. identify appropriate sources of information and evaluate them critically in terms of reliability and relevance to a particular topic:
- 5. engage in analytical and critical thinking with respect to the planning of engineering design and development projects;
- 6. quantify the environmental impact of a product/system through Life Cycle Analysis techniques;
- deal with complex issues both systematically and creatively, make sound judgements in the absence of complete data.

#### C - Subject-specific/Practical Skills

This programme provides opportunities for students to:

- apply expertly a number of different techniques used in the management and control of projects;
- be able to apply typical product/service lifecycle scenarios to a project at the initial concept stage.

#### D - Transferable Skills

This programme provides opportunities for students to:

- demonstrate problem solving skills and the application of knowledge across the discipline areas;
- 2. gather, select, and analyse a range of experimental and fieldwork data and present professionally using appropriate media;
- distil, synthesise and critically analyse alternative approaches and methodologies to problems and research results reported in literature and elsewhere;
- demonstrate initiative, self-direction and exercise personal responsibility for management of own learning;
- 5. work autonomously and become reflective learners;
- communicate effectively and confidently to appropriate professional and academic standards.