SECTION 1: KEY PROGRAMME DETAILS
What are the key details of my programme?

This section provides students with key details about their programme.

PART A: PROGRAMME INFORMATION	
Final Award Title	BSc(Hons) Engineering
Default Award Title (Exit Award)	N/A
Interim Award Titles (Exit Awards)	BSc Engineering Diploma of Higher Education Engineering Certificate of Higher Education Engineering
Awarding Institution	UWE Bristol
Teaching Institutions	N/A.
Partner Institutions	N/A
Delivery Locations	UWE Bristol – Frenchay Campus
Study Abroad / Exchange / Credit Recognition	N/A
Faculty Responsible For Programme	Faculty of the Environment and Technology (FET)
Department Responsible For Programme	Engineering Design and Mathematics (EDM)
Professional Statutory or Regulatory Body (PSRB) Links	N/A
Apprenticeship	N/A
Mode of Delivery	FT (attendance) with sandwich route available PT (attendance)

Entry Requirements	The University's Standard Entry Requirements apply Tariff points as appropriate for the year of entry - up to date requirements are available through the courses database. You should normally hold an HND or Foundation Degree (or equivalent) in an Engineering discipline. Previous study will identify the modules you meet the pre-requisites for.
For Implementation From	September 2019
Programme Codes	ISIS: H110 JACS/HECOS H100

PART B: FOR STUDENT AND ACADEMIC SERVICES COMPLETION ONLY	
First UVP Approval Date	15/01/2019
Date of Last Revalidation (through Programme Enhancement Review)	N/A
Next Programme Enhancement Review Date	2025/2026

SECTION 2: PROGRAMME OVERVIEW, AIMS and LEARNING OUTCOMES

What will I know, understand and be able to do on successful completion of the programme?

This section provides students with an overview of the programme, its aims and its learning outcomes. It sets out what prospective and registered students can expect to know, understand and be able to do on successful completion of the programme. Please write this section in the first person, addressing your prospective students.

PART A: PROGRAMME OVERVIEW, AIMS and LEARNING OUTCOMES

1. (Programme) Overview (c. 400 words)

The programme seeks to provide a foundation for lifelong learning with a strong emphasis on the development of appropriate knowledge, skills and professional values essential to an engineer from any branch of industry.

It aims to develop technically competent, broad based individuals who think and communicate effectively and who have the basis for conducting inquiry, carrying out problem solving and undertaking critical analysis in a constantly changing industrial context. Consequently, many of the modules are project based; group or individual.

The programme will produce graduates with a wide range of expertise relevant to industry in general and, depending on the modules selected, also include skills related to mechanical design, electronics, manufacturing and business.

The programme covers a broad range of disciplines such as Mechanical Analysis, Mathematics, Electronics, Business and Manufacture. Evidence from local industries indicates a solid demand for graduates with a broad-based 'systems' approach to engineering problem solving. It is anticipated that graduates from the course will play a major role in the design, management and co-ordination of multi-disciplinary projects.

2. Educational Aims (c. 4-6 aims)

The primary aim of the programme is to enable students from an engineering background with a FHEQ Level 5 qualification to achieve an Honours degree.
With great flexibility the programme draws modules from all of the BEng awards provided at UWE together with those from business. This flexibility allows students to build their study around prior knowledge, industrial requirements and personal interest.

The programme will develop a knowledge and understanding of current engineering practice and processes. Design is a significant component, especially in integrating a range of knowledge and understanding to design processes to meet defined needs using current technology.

Qualified engineers are in great demand and an honours degree can open up a wide range of careers some of which will require a professional qualification. Study at degree level ensures graduating students are well on their way to demonstrating the necessary competencies, identified in the UK-SPEC, to achieve IEng status.

3. Programme and Stage Learning Outcomes (c. 6-8 outcomes)

PART A: PROGRAMME OVERVIEW, AIMS and LEARNING OUTCOMES

The Engineering Council sets the overall requirements for the Accreditation of Higher Education Programmes (AHEP) in engineering, in line with the UK Standard for Professional Engineering Competence (UK-SPEC).

The Programme Learning Outcomes are based on AHEP3 and the UK-SPEC.

Programme (Learning) Outcomes (POs)

	PO Text
PO1	Knowledge and understanding of scientific principles and mathematics together with an awareness of the statistical methods necessary to support application of key engineering principles
PO2	Ability to apply an integrated or systems approach to engineering problems through know-how of the relevant technologies and their application
PO3	Apply problem-solving skills, technical knowledge and understanding to create or adapt designs solutions that are fit for purpose including operation, maintenance, reliability etc.
PO4	Knowledge and understanding of management techniques, including project management, that may be used to achieve engineering objectives
PO5	Awareness of the constraints on Design including environmental and sustainability limitations; ethical, health, safety, security and risk issues; intellectual property; codes of practice and standards
PO6	Understanding of and ability to use relevant materials, equipment, tools, processes, or products
PO7	Awareness of team roles and the ability to work as a member of an engineering team
PO8	Apply their skills in problem solving, communication, information retrieval, working with others and the effective use of general IT facilities

5. Programme (Learning) Outcomes (POs)

Programme Outcomes:	UFMFX8-30-3	UFMFU6-15-3	UFMFU7-15-3	UFMFD7-15-3	UFMFM7-15-3	UFMFE9-30-3	UFMFWF-15-3	UFMFV8-15-3	UFMFS7-15-3	UFMFH8-15-3	UFMFE7-15-3
PO1:	✓	✓	✓	✓		✓	✓		✓	✓	
PO2	✓	✓	✓	✓		✓	✓	✓		✓	✓
PO3:	✓	✓			✓		✓	✓	✓		
PO4:	✓				✓			✓			
PO5:	✓	✓			✓			✓	✓		
PO6:	✓	✓	✓			✓	✓	✓		✓	✓
PO7:	✓	✓			✓	✓	✓	✓	✓	✓	✓
PO8:	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

PART B: Programme Structure

1. 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

NOTE: Direct entry to the Programme is only at Level 6 although students may transfer to the Programme from the well-established BEng awards.

A typical student on the BSc(Hons) Engineering will start at Level 6 on a part-time basis.
The only compulsory module is the BEng Project (UFMFX8-30-3) with the remaining 90 credits being sourced from the well-established BEng Programmes together with an additional two modules from the Business School.

Typical module groupings for students focusing on Mechanical, Manufacturing or Electronics are:

Mechanical – Composite Engineering (UFMFU6-15-3), Computational Methods (UFMFU7-15-3), Energy Technologies (UFMFD7-15-3) and Business Environment (UFMFM7-15-3)

Manufacturing - Structural Design & Inspection (UFMFE9-30-3), Computational Methods (UFMFU7-15-3) and Managing Advanced Manufacture (UFMFWF-15-3)

Electronics - Group Design and Integration Project (UFMFV8-15-3), Communication (UFMFS7-15-3), Digital Signal Processing (UFMFH8-15-3) and Analogue Electronic Design (UFMFE7-15-3)

ENTRY		Compulsory Modules	Optional Modules	Awards
	Level 4		120 Level 4 Module credits from any approved BEng Programme	**Interim award**: Certificate of Higher Education Engineering *(120 credits)*

		Compulsory Modules	Optional Modules	Interim Awards
	Level 5		120 Level 5 Module credits from any approved BEng Programme	**Interim award**: Diploma of Higher Education Engineering *(240 credits)*

Year Out: Students transferring to the award may have undertaken an Industrial Placement (UFMF89-15-3). This module counts towards the 120 credits required at Level 3.

	Compulsory Modules	Optional Modules	Interim Awards
Level			

		Individual Project BEng UFMFX8-30-3 The BEng module is the default but the MEngA module can be accepted by agreement with the programme leader UFMFY8-30-3 Individual Project MEng Part A	90 Level 5 Module credits from any approved BEng Programme and: International Business in Emerging Markets (UFSD7W-15-3) Competing Through Quality (UMMD7N-15-3)	**Interim award**: BSc Engineering *(300 credits)* **HIGHEST AWARD:** BSc(Hons) Engineering *(360 credits)*

***Part time:**
The following structure diagram demonstrates the student journey from Entry through to Graduation for a typical **part time student.**

Part-time study available to direct entry students at Level 6.

ENTRY	Year 3.1	Compulsory Modules	Optional Modules	Awards
			Any Level 6 Module from the BEng Programmes and International Business in Emerging Markets (UFSD7W-15-3) Competing Through Quality (UMMD7N-15-3) To ensure one day per week of attendance the following groups of modules are recommended and are linked to the PT students in the BEng Awards. **Mechanical:** Composite Engineering (UFMFU6-15-3) Computational Methods (UFMFU7-15-3) Energy Technologies (UFMFD7-15-3) Business Environment (UFMFM7-15-3) **Manufacturing:** Structural Design & Inspection (UFMFE9-30-3) Computational Methods (UFMFU7-15-3) Managing Advanced Manufacture (UFMFWF-15-3) **Electronic:** Group Design and Integration Project (UFMFV8-15-3) Communication (UFMFS7-15-3) Digital Signal Processing (UFMFH8-15-3) Analogue Electronic Design (UFMFE7-15-3)	

		Compulsory Modules	Optional Modules	Interim Awards
	Year 3.2	Individual Project BEng UFMFX8-30-3 The BEng module is the default but the MEngA module can be accepted by agreement with the programme leader UFMFY8-30-3 Individual Project MEng Part A	Any Level 6 Module from the BEng Programmes and International Business in Emerging Markets (UFSD7W-15-3) Competing Through Quality (UMMD7N-15-3)	**Interim award**: BSc Engineering *(300 credits)* **HIGHEST AWARD:** BSc(Hons) Engineering *(360 credits)*

PART C: Higher Education Achievement Record (HEAR) Synopsis

This qualification complies with the UK framework for Higher Education Qualifications (FHEQ). The programme objectives have been aligned with those set by the Engineering Council (AHEP) and on successful completion of the course graduating students are well on their way to demonstrating the necessary competencies, identified in the UK-SPEC, to achieve IEng status. Students build on their FHEQ Level 5 knowledge learning though project work both individually and in teams. Practical skills are enhanced by the experimental work undertaken in our excellent laboratories and workshops. Industry standard software is used throughout the course.

PART D: EXTERNAL REFERENCE POINTS AND BENCHMARKS

This programme has been prepared with reference to a number of external benchmarks, including the QAA Subject Benchmark Statement for Engineering, the QAA Framework for HE Qualifications, the university's Learning & Teaching Strategy. In addition the Engineering Council sets the overall requirements for the Accreditation of Higher Education Programmes (AHEP) in engineering, in line with the UK Standard for Professional Engineering Competence (UK-SPEC).

UK-SPEC describes the competence and commitment requirements that have to be met for professional registration; accredited programmes provide some or all of the educational element for eventual registration as IEng.

The Programme outcomes directly link to these competencies and hence we have confidence that the programme is in accordance with the precepts of the QAA framework, AHEP3 and UK-SPEC.

PART E: REGULATIONS

A: Approved to University Regulations and Procedures