SECTION 1: KEY PROGRAMME DETAILS

This section provides students with key details about their programme.

PROGRAMME INFORMATION	
Final Award Title	BEng (Hons) Mechanical Engineering with Manufacturing
Default Award Title (Exit Award)	N/A
Interim Award Titles (Exit Awards)	BEng Mechanical Engineering with Manufacturing DIPHE Mechanical Engineering with Manufacturing CERTHE Mechanical Engineering with Manufacturing
Awarding Institution	UWE Bristol
Teaching Institutions	UWE Bristol
Partner Institutions	None
Delivery Locations	Frenchay Campus University Centre Weston (level 4) Ctiy of Bristol College (level 4)
Study Abroad / Exchange / Credit Recognition	N/A
Faculty Responsible For Programme	Environment and Technology
Department Responsible For Programme	Engineering, Design and Mathematics
Professional Statutory or Regulatory Body (PSRB) Links	None
Apprenticeship	UWE Lead Provider Aerospace Engineer Level 6 standard Manufacturing Engineer Level 6 standard
Mode of Delivery	FT, PT
Entry Requirements	The University's Standard Entry Requirements Tariff points as appropriate for the year of entry - up to date requirements are available through the courses database.
For Implementation From	Implementation from September 2020

PROGRAMME INFORMATION	
Programme Codes	ISIS: H3H743

PART B: FOR STUDENT AND ACADEMIC SERVICES COMPLETION ONLY	
First UVP Approval Date	**Date of first UVP approval**
Date of Last Revalidation (through Programme Enhancement Review)	**Dates of subsequent PERs and revalidations**
Next Programme Enhancement Review Date	**Academic year in which next Programme Enhancement Review due (6 years from initial approval or last PER)**

SECTION 2: PROGRAMME OVERVIEW, AIMS and LEARNING OUTCOMES

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 curriculum is designed for students seeking an engineering education closely aligned to engineering practice. Technical knowledge, engineering practice, business awareness and sustainability are integrated through projects and revisited to produce confident graduates able to apply their skills to novel situations and create engineering solutions that benefit society.

Professional development is placed at the heart of the curriculum. From day one, students are taken on a journey from student engineer to graduate engineer, preparing them for life as an engineering professional. Students will identify, develop and demonstrate competencies expected of a professional engineer in the workplace. Projects and activities, embedded throughout the curriculum, are designed to develop the engineering habits of mind such as: Problem-finding, Problem-solving, Visualising, Systems Thinking, Improving, and Adapting. Foundation principles of engineering science, skills and practice are integrated throughout all years of study.

Mechanical engineers are employed throughout the engineering sector in the creation, maintenance and improvement of engineering operations. Consequently mechanical engineering graduates need to be able to integrate engineering knowledge skills from across engineering and be able to be an effective member of a multidisciplinary team. Mechanical engineering topics of engineering analysis, design, structures, stress analysis, dynamics, materials, thermofluids, systems and manufacturing are developed throughout the core and taken to an advanced level in the optional modules. Sufficient electrical and electronic content has been included in the core

PART A: PROGRAMME OVERVIEW, AIMS and LEARNING OUTCOMES

programme for the study of engineering problems involving electromechanical and mechatronic systems.

The ability to work in multidisciplinary teams on projects that require a broader view of the role of engineering in industry and society is developed through the core programme using project weeks to bring students together in problem finding and solution spaces where students are able to interact with each other, academics and external practitioners.

The integration of knowledge, skills and practice allows the tacking of real engineering challenges and encourage students to engage with the wider role that mechanical engineers and specifically engineering habits of mind can play in tackling global challenges. This is an accessible and modern engineering curriculum designed to attract students from diverse backgrounds able to see the future role of engineering in industry and society.

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

As a result of successful completion of this programme, a student will

1. be able to work as a graduate mechanical engineer across the engineering sector able to work as an effective member of a multidisciplinary team.

2. have acquired the knowledge and understanding of scientific principles and methods necessary to underpin an education in engineering. The programme will provide insight into, and practical skills in, the creation and maintenance of complex engineering products and will explore the environmental impact of engineering.

3. have demonstrated an ability to integrate their knowledge and understanding of core subject material in order to solve a substantial range of engineering problems, including ones of a complex nature either individually or as part of a team.

4. have developed and demonstrated understanding of the competencies and social responsibilities required by a professional engineer in the workplace and society. Activities to scaffold this development are embedded throughout the core curriculum to develop the engineering habits of mind. As a consequence, students will be able to critically appraise the value and effectiveness of future engineering innovations in the field in terms of business improvement and environmental sustainability.

5. have the requisite academic knowledge, skills and preparation for progression to study for higher degrees in appropriate engineering disciplines.

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

PART A: PROGRAMME OVERVIEW, AIMS and LEARNING OUTCOMES

Programme (Learning) Outcomes (POs)

No.	PO Text
PO1	apply established and novel mechanical analysis concepts to solve engineering problems involving design, operations and manufacture that arise across mechanical engineering applications.
PO2	use systems incorporating digital hardware, software, communication, processing algorithms, interfacing circuits and parameter sensing and actuating devices.
PO3	model mechanical engineering systems and be able to specify and assess technical designs.
PO4	understand the manufacturing, financial and marketing implications of design proposals.
PO5	identify the links between design, manufacturing and production management and assess the capabilities of manufacturing systems software used in the design, maintenance and improvement of manufacturing facilities.
PO6	Communicate and operate effectively either as individuals or as members of a team.
PO7	pursue independent study, undertake enquiry into novel and unfamiliar concepts and implement change in an engineering environment.
PO8	make considered judgements and decisions on complex engineering issues in which not all facts and consequences are accurately known.

4. Programme (Learning) Outcomes (POs) Mapping

Programme Outcomes: Level 4 and 5 modules	UFMFKS-30-1 (core)	UFMFLS-30-1 (core)	UFMFMS-30-1 (core)	UFMFNS-15-1 (core)	UFMFPS-15-1 (core)	UFMFQS-15-2 (core)	UFMFRS-15-2 (core)	UFMFSS-30-2 (core)	UFMFXA-15-2 (core)	UFMFP7-15-2 (core)	UFMFUS-15-2 (core)	UFMFVH-15-2 (core)
PO1:	x	x	x						x		x	x
PO2:										x	x	
PO3:		x	x	x	x			x			x	
PO4:	x	x								x		x
PO5:	x	x					x		x	x	x	x
PO6:	x	x	x	x	x	x	x	x			x	
PO7:		x	x	x	x	x						
PO8:	x		x	x	x	x			x			x

4. Programme (Learning) Outcomes (POs) Mapping

Programme Outcomes: Level 6 Option numbering indicates mutually exclusive options	UFMFX8-30-3 (core)	UFMFV8-15-3 (core)	UFMFPB-15-3 (core)	UFMFNQ-15-3 (core)	UFMFTB-15-3 (core)	UFMFU6-15-3 (op)	UFMF7K-15-3 (op)	UFMFSL-15-3 (core)
PO1:	x		x			x	x	x
PO2:	x	x			x			x
PO3:	x		x			x	x	x
PO4:		x	x	x	x			
PO5:	x				x			
PO6:	x	x		x		x	x	x
PO7:	x	x		x				x
PO8:	x	x	x		x			x

PART B: PROGRAMME STRUCTURE

1. Structure (Full-time)

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

- level and credit requirements
- interim award titles
- compulsory and optional modules

Year: 1

Interim award: CertHE Mechanical Engineering with Manufacturing requires 120 credits at the appropriate level. Please refer to UWE Academic Regulations for details.

Compulsory modules

Module Code	Module Title	Level	Credit
UFMFKS-30-1	Engineering Practice 1	4	30
UFMFLS-30-1	Solid Mechanics, Materials and Manufacturing	4	30
UFMFMS-30-1	Dynamics Modelling and Simulation	4	30
UFMFNS-15-1	Thermofluids	4	15
UFMFPS-15-1	Applied Electrical Technology	4	15

Year: 2

Interim award: CertHE Mechanical Engineering with Manufacturing requires 120 credits at the appropriate level. Please refer to UWE Academic Regulations for details.

Compulsory modules

Module Code	Module title	Level	Credit
UFMFQS-15-2	Engineering Practice 2	5	15
UFMFXA-15-2	Quality Control Systems	5	15
UFMFSS-30-2	Structural Mechanics	5	30
UFMFP7-15-2	Manufacturing Technology	5	15
UFMFVH-15-2	Lifecycle Engineering for Manufacturing Systems	5	15

Year: 3

Interim award: DipHE Mechanical Engineering with Manufacturing requires 240 credits at the appropriate level. Please refer to UWE Academic Regulations for details.

Module Code	Module title	Level	Credit
UFMFUS-15-2	Systems Design	5	15
UFMFRS-15-2	Engineering Research	5	15
UFMFNQ-15-3	Professionalism for Engineers	6	15
UFMFPB-15-3	Reliability Engineering and asset management	6	15

Optional Modules: Select 15 credits from

Module Code	Module title	Level	Credit
UFMFU6-15-3	Composite Engineering **or**	6	15
UFMF7K-15-3	Materials and Structures for Special Applications	6	15

Year: 4

Interim award: BEng Mechanical Engineering with Manufacturing requires 300 credits at the appropriate level. Please refer to UWE Academic Regulations for details.

Compulsory modules

Module Code	Module title	Level	Credit
UFMFX8-30-3	Engineering Project	6	30
UFMFV8-15-3	Group Design and Integration Project	6	15
UFMFSL 15 3	Integrated Electromechanical system	6	15
UFMFTB-15-3	Lean Factory Design	6	15

PART C: HIGHER EDUCATION ACHIEVEMENT RECORD (HEAR) SYNOPSIS

Graduates of this programme will be equipped with a broad understanding of mechanical analysis and design, combined with knowledge of engineering practice, information technology, project management and manufacturing.

The programme produces graduates with a broad-based 'systems' approach to engineering problem solving. Graduates from this programme will be equipped to work in multi-disciplinary teams, able to critically appraise existing ideas and practice and produce creative solutions to engineering problems.

PART D: EXTERNAL 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 statement for Higher Education qualifications in engineering (Feb 2015)
- Qualification characteristics for Degree Apprenticeships
- Strategy 2030
- University policies
- Staff research projects
- Relevant PSRB requirements: AHEP3
- Industrial Advisory Board

Manufacturing Engineer Degree Apprenticeship Standard Aerospace Engineer Degree Apprenticeship Standard
Appendix 1 - presents the Programme/Apprenticeship Standard mapping to Aerospace standard (ST0010)
Appendix 2 - presents the Programme/Apprenticeship Standard mapping to Manufacturing Engineer standard (ST0025).

PART E: REGULATIONS

B: Approved variant to University Academic Regulations and Procedures

The following variant regulations have been approved by the University Regulations to comply with conditions set out be Engineering Council UK.

- The degree classification for the 360 credit honours degree BEng (Hons) Mechanical Engineering with Manufacturing is based upon
    - the best marks for 100 credits at level 3 and the best marks achieved for the next 100 credits at level 2 or above.
    - Marks achieved for the 100 level 3 credits are weighted three times the value of the marks for the 100 credits at level 2 or above.
    - The calculation at level 3 must always use the full credit and mark for the level 3 project module UFMFX8-30-3 followed by the best marks associated with the remaining level 3 credits.
    - Where the credit size of the best marks associated with the remaining level 3 modules would give a credit total greater than 100, only the relevant portion of credit is counted. The unused credit may be counted towards the set of best marks at level 2 or above.
- The classification method for direct entrants to the BEng in Mechanical Engineering with Manufacturing will include the marks and whole credit for the project.

Condoned Credit
From September 2020 intake onwards to comply with conditions set out by Engineering Council UK we will only be able to condone a maximum of 30 credits.

Appendix 1 Programme mapping Manufacturing Engineer standard (ST0025)

✓ MSLO meet ○ MSLO Partially met ***Learning Outcomes:***	UFMFKS-30-1	UFMFLS-30-1	UFMFMS-30-1	UFMFNS-15-1	UFMFPS-15-1	UFMFQS-15-2	UFMFRS-15-2	UFMFSS-30-2	UFMFXA-15-2	UFMFP7-15-2	UFMFUS-15-2	UFMFVH-15-2	UFMFPB-15-3	UFMFX8-30-3	UFMFSL-15-3	UFMFV8-15-3	UFMFNQ-15-3	UFMFTB-15-3	UFMFU6-15-3	UFMF7K-15-3
A- Knowledge																				
K1 - Mathematics and science for engineers	✓	✓	✓	✓		✓		✓	✓		✓		✓	✓					✓	✓
K2 - Materials and manufacture		✓						✓			✓	✓	✓						✓	✓
K3 - 3D Computer Aided Design and Computer Aided Engineering	✓	✓	✓					✓		✓	✓	✓	✓		✓					
K4 - How to run and manage business led projects							○					✓				✓		✓		
K5 - Engineering operations and business management												✓	✓				✓	✓		
K6 - Manufacturing processes		✓								✓		✓	✓					✓	✓	✓

S - Skills																				
S1 - Complying with statutory regulations and stringent organisational safety requirements and demonstrate a responsible and disciplined approach to risk mitigation, avoidance and management.							✓						✓	✓						
S2 - Undertake project management and schedule of engineering activities.	✓						✓							✓		✓	✓			
S3 - Secure and manage appropriate resources																				
S4 - Manage budgets																				
S5 - Implement engineering processes																		✓		
S6 - Monitor and evaluate engineering processes												✓	✓					✓		
B- Behaviour																				
B1 - **Safety mindset**: The importance of complying with statutory and organisational health, safety and risk management requirements and the implications if these are not adhered to.													✓					✓		
B2 - **Strong work ethic**: Positive attitude, motivated by engineering; dependable,														✓						

ethical, responsible and reliable.																				
B3 - **Logical approach**: Able to structure a plan and develop activities following a logical thought process, but also able to quickly "think on feet" when working through them.		✓					✓					✓	✓	✓	✓	✓			✓	✓
B4 - **Problem solving orientation**: Identifies issues quickly, enjoys solving complex problems and applies appropriate solutions. Has a strong desire to push to ensure the true root cause of any problem is found and a solution identified which prevents further recurrence.	✓		✓		✓		✓	✓	✓		✓	✓	✓		✓	✓		✓		
B5 - **Quality focus**: Follows rules, procedures and principles in ensuring work completed is fit for purpose and pays attention to detail / error checks throughout activities.									✓				✓					✓		
B6 - **Personal responsibility and resilience**: Motivated to succeed accountable and persistent to complete task.							✓						✓				✓			
B7 - **Clear communicator:** Use a variety of appropriate communication methods to give/receive information	✓						✓			✓		✓	✓	✓		✓				

accurately, and in a timely and positive manner.																				
B8 - **Team player:** Not only plays own part but able to work and communicate clearly and effectively within a team and interacts/ helps others when required. In doing so applies these skills in a respectful professional manner.	✓															✓				
B9 - **Applies Lean Manufacturing Principles:** Continuous improvement in driving effectiveness and efficiency													✓					✓		
B10 - **Adaptability:** Able to adjust to different conditions, technologies, situations and environments.							✓				✓		✓					✓		
B11 - **Self-Motivation:** A 'self-starter', who always wants to give their best, sets themselves challenging targets, can make their own decisions.												✓		✓						
B12 - **Willingness to learn:** wants to drive their continuous professional development	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Appendix 2 Programme mapping to Aerospace Standard (ST0010)

✓ ASLO meet o ASLO Partially met Learning Outcomes:		UFMFKS-30-1	UFMFLS-30-1	UFMFMS-30-1	UFMFNS-15-1	UFMFPS-15-1	UFMFQS-15-2	UFMFRS-15-2	UFMFSS-30-2	UFMFXA-15-2	UFMFP7-15-2	UFMFUS-15-2	UFMFVH-15-2	UFMFPB-15-3	UFMFX8-30-3	UFMFSL-15-3	UFMFV8-15-3	UFMFNQ-15-3	UFMFTB-15-3	UFMFU6-15-3	UFMF7K-15-3
Knowledge																					
Understand engineering process & practices covering:	Mechanical/electrical/electronic systems design					✓						✓				✓					
	Design and Stress Analysis (e.g. computer aided engineering techniques)	✓		✓					✓			✓		✓						✓	✓
	System design											✓									
	Integration and test					✓						✓				✓					
	In-service and through product life support												✓	✓						✓	✓
	Advanced manufacturing										✓										
	Aerospace quality and governance												✓								
Understand the applicable regulatory and quality requirement	As systems and products mature through their development												✓	✓					✓		
	Qualification and in-service phases												✓								

Understand and apply analytical methods – Engineering Mathematics	Algebra, differentiation, function, geometry, trigonometry	✓			✓				✓			✓		✓					✓		
	Statistics									✓				✓					✓		
Understand material sciences	Stress and strain			✓				✓				✓								✓	✓
	Static and dynamic systems			✓				✓													
	Force, resistance, mass and weight, motion			✓				✓													
	Electrical power					✓						✓			✓						
Skills																					
Regulations	Demonstrate the ability to comply with statutory, organisational, environmental, health and safety regulations/							✓						✓			✓	✓			
Business improvement techniques	Apply business improvement techniques ensuring optimisation of processes, resources and budgets						✓										✓	✓			
Apply a wide range of technical skill sets applied to a range of aerospace disciplines and contexts	Research							✓						✓	✓	✓	✓				
	Development												✓		✓						
	Design	✓										✓			✓						
	Procurement																				
	Logistics																				
	Planning				✓											✓					
	Production																				
	Quality Assurance									✓											
	Inspection									✓											
	Testing					✓						✓								✓	✓
	Installation																				
	Commissioning																				
	Life cycle management												✓								
	Decommissioning																				
	Environmental Compliance																				
Behaviours						✓								✓							

Knowledge and understanding	Commitment to continue personal development, refreshing and expanding Engineering knowledge through a variety of methods														✓			✓			
Design and development of processes, systems, services and products	Contributing to the continuing development of Engineering within their domain														✓			✓			
Responsibility, management or leadership	Taking personal responsibility for their actions, managing projects, including resource management within their remit														✓						
Professional commitment	Demonstrating a personal and professional commitment to society, their profession and the environment, adopting a set of values and behaviours that will maintain and enhance the reputation of the profession.														✓						
Communication and inter-personal skills	Be able to demonstrate a range of communication styles and methods. Understanding the importance of network within and across functions														✓			✓	✓		

STU

✓ ASLO meet

o ASLO Partially met

Learning Outcomes:		UFMFKS-30-1	UFMFLS-30-1	UFMFMS-30-1	UFMFNS-15-1	UFMFPS-15-1	UFMFQS-15-2	UFMFRS-15-2	UFMFSS-30-2	UFMFXA-15-2	UFMFP7-15-2	UFMFUS-15-2	UFMFVH-15-2	UFMFPB-15-3	UFMFX8-30-3	UFMFSL-15-3	UFMFV8-15-3	UFMFNQ-15-3	UFMFTB-15-3	UFMFU6-15-3	UFMF7K-15-3
Knowledge																					
Understand engineering process & practices covering:	Mechanical/electrical/electronic systems design					✓						✓				✓					
	Design and Stress Analysis (e.g. computer aided engineering techniques)	✓		✓					✓			✓		✓						✓	✓
	System design											✓									
	Integration and test					✓						✓				✓					
	In-service and through product life support												✓	✓						✓	✓
	Advanced manufacturing										✓										
	Aerospace quality and governance												✓								
Understand the applicable regulatory and quality requirement	As systems and products mature through their development												✓	✓					✓		
	Qualification and in-service phases												✓								
Understand and apply analytical methods – Engineering Mathematics	Algebra, differentiation, function, geometry, trigonometry	✓			✓				✓			✓		✓					✓		
	Statistics									✓				✓					✓		
Understand material sciences	Stress and strain			✓				✓				✓								✓	✓
	Static and dynamic systems			✓				✓													
	Force, resistance, mass and weight, motion			✓				✓													
	Electrical power					✓						✓				✓					
Skills																					

Regulations	Demonstrate the ability to comply with statutory, organisational, environmental, health and safety regulations/							✓						✓			✓	✓		
Business improvement techniques	Apply business improvement techniques ensuring optimisation of processes, resources and budgets						✓										✓	✓		
Apply a wide range of technical skill sets applied to a range of aerospace disciplines and contexts	Research							✓						✓	✓	✓	✓			
	Development												✓		✓					
	Design	✓									✓				✓					
	Procurement																			
	Logistics																			
	Planning				✓											✓				
	Production																			
	Quality Assurance								✓											
	Inspection								✓											
	Testing					✓					✓							✓	✓	
	Installation																			
	Commissioning																			
	Life cycle management											✓								
	Decommissioning																			
	Environmental Compliance																			
Behaviours						✓								✓						
Knowledge and understanding	Commitment to continue personal development, refreshing and expanding Engineering knowledge through a variety of methods													✓			✓			
Design and development of processes, systems, services and products	Contributing to the continuing development of Engineering within their domain													✓			✓			

Responsibility, management or leadership	Taking personal responsibility for their actions, managing projects, including resource management within their remit													✓						
Professional commitment	Demonstrating a personal and professional commitment to society, their profession and the environment, adopting a set of values and behaviours that will maintain and enhance the reputation of the profession.													✓						
Communication and inter-personal skills	Be able to demonstrate a range of communication styles and methods. Understanding the importance of network within and across functions													✓			✓	✓		

STU

✓ ASLO meet

o ASLO Partially met

Learning Outcomes:		UFMFKS-30-1	UFMFLS-30-1	UFMFMS-30-1	UFMFNS-15-1	UFMFPS-15-1	UFMFQS-15-2	UFMFRS-15-2	UFMFSS-30-2	UFMFXA-15-2	UFMFP7-15-2	UFMFUS-15-2	UFMFVH-15-2	UFMFPB-15-3	UFMFX8-30-3	UFMFSL-15-3	UFMFV8-15-3	UFMFNQ-15-3	UFMFTB-15-3	UFMFU6-15-3	UFMF7K-15-3
Knowledge																					
Understand engineering process & practices covering:	Mechanical/electrical/electronic systems design					✓						✓				✓					
	Design and Stress Analysis (e.g. computer aided engineering techniques)	✓		✓					✓			✓		✓						✓	✓
	System design											✓									
	Integration and test					✓						✓				✓					
	In-service and through product life support												✓	✓						✓	✓
	Advanced manufacturing										✓										
	Aerospace quality and governance												✓								
Understand the applicable regulatory and quality requirement	As systems and products mature through their development												✓	✓					✓		
	Qualification and in-service phases												✓								
Understand and apply analytical methods – Engineering Mathematics	Algebra, differentiation, function, geometry, trigonometry	✓			✓				✓			✓		✓					✓		
	Statistics									✓				✓					✓		
Understand material sciences	Stress and strain			✓				✓				✓								✓	✓
	Static and dynamic systems			✓				✓													
	Force, resistance, mass and weight, motion			✓				✓													
	Electrical power					✓						✓				✓					
Skills																					

Regulations	Demonstrate the ability to comply with statutory, organisational, environmental, health and safety regulations/							✓						✓			✓	✓		
Business improvement techniques	Apply business improvement techniques ensuring optimisation of processes, resources and budgets						✓										✓	✓		
Apply a wide range of technical skill sets applied to a range of aerospace disciplines and contexts	Research							✓						✓	✓	✓	✓			
	Development												✓		✓					
	Design	✓									✓				✓					
	Procurement																			
	Logistics																			
	Planning				✓											✓				
	Production																			
	Quality Assurance								✓											
	Inspection								✓											
	Testing					✓					✓							✓	✓	
	Installation																			
	Commissioning																			
	Life cycle management											✓								
	Decommissioning																			
	Environmental Compliance																			
Behaviours						✓								✓						
Knowledge and understanding	Commitment to continue personal development, refreshing and expanding Engineering knowledge through a variety of methods													✓			✓			
Design and development of processes, systems, services and products	Contributing to the continuing development of Engineering within their domain													✓			✓			

Responsibility, management or leadership	Taking personal responsibility for their actions, managing projects, including resource management within their remit													✓						
Professional commitment	Demonstrating a personal and professional commitment to society, their profession and the environment, adopting a set of values and behaviours that will maintain and enhance the reputation of the profession.													✓						
Communication and inter-personal skills	Be able to demonstrate a range of communication styles and methods. Understanding the importance of network within and across functions													✓			✓	✓		