

KEY PROGRAMME INFORMATION

Originating institution(s) Bournemouth University		Faculty responsible for the programme Faculty of Science and Technology	
Apprenticeship Standard Manufacturing Engineer (ST0025)		Assessment Plan v1.2 Integrated EPA	
End Point Assessment type Integrated	Main training provider University Centre Newbury		Approved sub-contractors NA
Type of apprenticeship Integrated			
Final award(s), title(s) and credit BEng (Hons) Engineering Design (Manufacturing Engineering) – Level 6 credits			
Intermediate award(s), title(s) and credits N/A			
UCAS Programme Code(s) (where applicable and if known) N/A	HECoS (Higher Education Classification of Subjects) Code and balanced or major/minor load. 100184 (Major) 100213 (Minor)		LARS (Learning Aims Reference) code 11
External reference points UK Quality Code for Higher Education; 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 (2023); UK Standard for Professional Engineering Competence: Engineering Technician, Incorporated Engineer and Chartered Engineer Standard (UK-SPEC) fourth edition from the Engineering Council UK (August 2020); UK Standard for Professional Engineering Competence: The Accreditation of Higher Education Programmes fourth edition from the Engineering Council UK (Aug 2020).			
Professional, Statutory and Regulatory Body (PSRB) links Accreditation will be sought from the Institution of Engineering Designers (IED) to meet further learning for Incorporated Engineer (IEng). Graduates from a top-up degree that has been accredited must also have completed an accredited first qualification (eg foundation degree or HND) to be considered to hold an accredited degree.			
Locations of off-the-job training delivery University Centre Newbury			
Mode(s) of delivery Day Release			
Typical duration (include any requirements stated in Apprenticeship Standard) Typical duration: 5 Years (including levels 4, 5 and 6) – 1 year within the scope of this document Length of Gateway Period: 4 years (including levels 4,5 and 6)- 1 year within the scope of this document			
Date of first intake September 2025		Expected start dates September	

Programme Specification - Section 2

Maximum apprentice numbers N/A	
Partner(s) University Centre Newbury	Partnership model Franchise
Date of this Programme Specification May 2025	
Version number V1.0-0925	
Approval, review or modification reference numbers E2324P3 – Approved 12/05/2025	
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Programme Specification - Section 2

PROGRAMME STRUCTURE

Apprentices undertake the following pathway with their specialisation at Level 5/HND in Manufacturing Engineering or equivalent:

Manufacturing Engineer

Programme Award and Title: BEng (Hons) Engineering Design (Manufacturing Engineering)								
Year 1 (Top-up) /Level 6								
Unit Name	Core/Option	No. of Credits	Assessment Element Weightings			Expected Contact hours per unit	Unit Version No.	HECoS Code (plus balanced or major/ minor load)
			Exam 1	Cwk 1	Cwk 2			
Advanced Engineering (UCN)	Core	20		100%		25	1.0	100184
Innovation and Professional Practice (UCN)	Core	20	30%	70%		25	1.0	101221
Computational Engineering (UCN)	Core	20		100%		25	1.0	100160
Mechatronics (UCN)	Core	20		40%	60%	25	1.0	100170
EPA BEng Project and Professional Discussion-ME (UCN)	Core	40		50%	50%	30	1.0	100184
Applied Research Methods and Portfolio Building (UCN)	Core	0		Pass/Fail	Pass/Fail	24	1.0	
End Point Assessment This award covers integrated apprenticeship. The end-point assessment (EPA) for the integrated apprenticeship requires the apprentice must pass the EPA BEng Project and Professional Discussion-ME (UCN) to gain the exit qualification. The EPA period must only start once the employer and UCN/BU are satisfied that the apprentice is demonstrating the knowledge, skills and behaviours of the apprenticeship standard, and all of the pre-requisite gateway requirements for EPA as defined in the assessment plan and apprenticeship funding rules have been met. Mappings to KSBs can be found in Knowledge, Skills and Behaviours Mapping Schedule section.								
Progression requirements: Students who have successfully completed the HND in Engineering (Manufacturing) programme at University Centre Newbury with a Pass will be eligible to apply for entry with advanced standing to the Level 6 of the BEng (Hons) Engineering Design (Manufacturing Engineering) programme at Bournemouth University.								
Exit qualification: BEng (Hons) Engineering Design (Manufacturing Engineering)								

Gateway and End Point Assessment requirements:

Manufacturing Engineer (ST0025) V1.2- Integrated EPA

There are two assessment components, which are managed by the End-Point Assessment Organisation. These are: Method 1- Project with report, presentation and questioning; and Method 2- Professional discussion underpinned by a portfolio of evidence.

Method 1: Project with report, presentation and questioning

- Complete a project with title and scope must be agreed with the EPAO at the gateway and write a report with maximum of 9000 words (with a 10% tolerance).
- Prepare and give a presentation to an independent assessor. Presentation slides and any supporting materials should be submitted at the same time as the project output.
- The presentation with questions will last at least 60 minutes+10%. This will typically include a presentation of 20 minutes and questioning lasting 40 minutes. The independent assessor will ask at least 5 questions about the project and presentation.

Method 2: Professional discussion underpinned by a portfolio of evidence

- A portfolio of evidence before the EPA gateway should be compiled, which can be used to help answer the questions.
- A professional discussion with an independent assessor will last 60 minutes. They will ask at least 5 questions covering certain aspects of the learner's occupation

The details of EPA and grading criteria can be found in the [EPA Plan](#) for ST0025.

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:

- have a set of modern professional engineering skills at the forefront of the discipline informed by research and industry.
- have the ability to independently select appropriate strategies to successfully plan and execute an engineering project underpinned by relevant research literature and adapt them in unfamiliar situations to produce innovative designs, systems, components or processes to fulfil new needs effectively.
- have the ability and confidence to apply their knowledge and skills to complex/unfamiliar mechanical engineering problems individually or in a group, demonstrating effective leadership and the ability to manage relationships in project teams, and communicating effectively with both those working in the field of engineering and with the wider public.
- have the ability to apply and integrate knowledge and understanding of other engineering disciplines to support study of the mechanical engineering discipline.
- have a mastery of a range of project management techniques demonstrating analytical and critical thinking with respect to the planning of engineering design and development projects.
- have a working knowledge and understanding of business-related issues, encompassing finance, development, marketing, and legal issues.
- have a broad understanding of business and management processes, security risks, and the application of business law and intellectual property.
- have comprehensive knowledge and understanding of a wide range of existing and emerging theories, technologies and processes and demonstrate professional competence and critical awareness when selecting and applying them for design and analysis.
- recognise that the impacts of their decisions may be global and long-lasting and are able to apply the principles of ethics as well as sustainability through the UNSD Goals.
- are equipped to work with stakeholders and social and cultural structures, both within and outside of their normal community of practice, recognising the benefits and importance of equality, diversity and inclusion, that the impacts of their decisions may be global and long-lasting.

The BEng (Hons) Engineering Design programme will develop high calibre engineers who are able to function both as an engineer and a technology leader in industries such as aerospace, electronic, automotive, alternative energy, oil and gas, and similar high-tech industries.

Key to the exploitation of emerging technologies is understanding their behaviour, performance and limitations. The ability to model and simulate the performance of new technologies is paramount where design optimisation is required.

Advanced modelling and simulation techniques can also be harnessed to shorten design time and reduce market entry costs. This is essential where emerging technologies are exploited as existing methodologies may prohibit lengthy development programmes.

Understanding how emerging technologies can be harnessed through enterprise is essential for an innovative market. Therefore, sound business knowledge is required as well as identifying avenues for research funding and strategic collaboration.

The main emphasis of the programme will be in studying solid-state mechanics, manufacturing, electronic design and/or modern/non-traditional engineering technologies and their integration. An aligned individual project together with up-to-date engineering skills will ensure the graduate can not only understand the technologies but apply them.

Programme Specification - Section 2

The programme seeks to develop global citizens who understand how the world works economically, politically, socially, culturally, technologically and environmentally. They will be able to balance the demands of industry against ethical practice and social and environmental impacts identified in the UNSD Goals. Students will develop team-working skills and understand the importance and benefit of equality, diversity and inclusion.

The apprentices who joined at level 4 at UCN or level 5 at HND and have completed the HND in Manufacturing will join the top-up programme. UCN will be delivering the apprenticeship and Bournemouth University will act as EPAO for the integrated apprenticeship standard. The Knowledge, Skills and Behaviours for the Manufacturing Engineer standard (ST0025) have been mapped for the L6 Degree Top-Up programme. The mapping of level 4 to 5 programmes of study is outside the scope of this programme specification.

Programmes differentiate through the candidate's progression route and project selection:

- Candidates progressing from UCN HND Engineering (Manufacturing) or equivalent will normally complete a project in the Manufacturing discipline and graduate with a BEng (Hons) Engineering Design (Manufacturing Engineering).

ALIGNMENT WITH THE UNIVERSITY'S STRATEGIC PLAN

The BEng (Hons) Engineering Design programme is informed by and aligned with Bournemouth University's 2025 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, 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 engineers and demonstrators/technicians.

KNOWLEDGE, SKILLS AND BEHAVIOURS MAPPING SCHEDULE

1. Manufacturing Engineer (Integrated)

Exit award: BEng (Hons) Engineering Design (Manufacturing Engineering)

KSB Reference	Innovation & Professional Practice (UCN)	Advanced Engineering (UCN)	EPA BEng Project and Professional Discussion-ME (UCN)	Computational Engineering (UCN)	Mechatronics (UCN)
Level	6	6	6	6	6
K1: Safety and security legislation, regulations and standards associated with the manufacturing engineering environment. Cyber security and statutory safety standards.	x		x		x
K2: Hazards, risks and safe systems of work in a manufacturing engineering environment.	x		x		x
K3: Principles and applications of mechanics in a manufacturing environment: motion, energy and force to ensure that systems and components function safely, efficiently and reliably.		x	x	x	x
K4: Factors that determine material, resource, equipment and component selection. For example, quality, efficiency, performance, workforce and layout.			x		
K5: Verbal communication techniques. Giving and receiving information. Matching style to audience. Barriers in communication and ways to overcome them.			x		
K6: Principles of mathematics and scientific methods including analytical techniques. Evaluating statistical data, complex numbers and matrices required in a manufacturing environment.				x	
K7: Principles of electrical, electronic systems, components, schematic and circuit diagrams, control and digital engineering relevant to manufacturing environments.				x	
K8: Data collection, storage, and presentation techniques.			x		
K9: Project commercials: delays, changes and impacts.	x		x		
K10: Techniques used for improving and enhancing manufactured products, commodities, systems or components: safety, reliability, quality, performance and sustainability.	x	x		x	x

K11: Problem solving tools and techniques for establishing performance characteristics, for example: Define, Measure, Analyse, Improve and Control (DMAIC), Failure Mode Effect Analysis (FMEA), Plan-Do-Check-Act (PDCA), Fishbone diagrams.			x	x	
K12: Workplace training and development techniques: personal and professional development. Coaching and transfer of knowledge.	x				
K13: Processes and procedures used to optimise safety, efficiency, performance, productivity and sustainability.	x		x		x
K14: Quality management and assurance processes.	x				
K15: Management of change (MOC) processes: requesting change, determining viability, planning, implementing and evaluating changes to a product, system or component. Use of data to support change. Adherence to MOC, risks and limitations of MOC approval.	x		x		
K16: Principles of Computer Aided Design (CAD) and the application in a manufacturing environment.		x		x	
K17: Principles and applications of simulation software in a manufacturing environment.				x	
K18: Project management techniques for project delivery: planning, cost and budget control, risk, and quality.	x		x		
K19: Current and emerging technology in a manufacturing environment: mechanical and electrical integration, digitalisation, artificial intelligence, Internet of Things, manufacturing systems, robotics, 3D printing, awareness of cloud computing and cyber security.		x			x
K20: Maintenance management strategies of plant machinery, systems and equipment. For example, planned and preventative maintenance.					x
K21: Collaboration working methods with stakeholders: best practice, quality and performance measures, issue resolution.	x				
K22: Manufacturing processes and technologies, for example small or batch manufacturing, machining, casting, molding, automation, continuous flow, and high and low volume manufacturing.					
K23: Teamwork and leadership: negotiation techniques, conflict management and development techniques.	x		x		
K24: Written communication techniques. Plain English principles. Manufacturing engineering terminology. Report writing, presentations, data analysis documentation.			x		
K25: Equity, diversity, and inclusion in the workplace. Unconscious bias.	x				
K26: Environmental and sustainability legislation, regulations and standards associated with the manufacturing engineering environment. Carbon zero, recycling and reusability targets.			x		
K27: Project documentation: ownership, company procedures, selection and appropriate use.	x				

K28: Pre-operation checks required on plant and equipment.					
S1: Translate conceptual ideas or technical requirements into developmental outcomes, operational designs, or specifications for manufacturing projects or programmes of work.			x	x	
S2: Select, use and apply approved problem-solving methods to solve problems and determine solutions or actions.			x	x	
S3: Collate, store, use and present data and supporting documentation.			x		
S4: Interpret and produce technical documentation such as schematic and circuit diagrams, engineering drawings or 3D CAD models, simulation models, engineering reports, test reports, fault reports or data analytics.		x	x	x	
S5: Observe, record and draw accurate and auditable conclusions from data evidence.			x		
S6: Manage assigned projects or programmes of work, taking into account factors such as planning, safety, quality, cost, performance and sustainability.	x		x		
S7: Apply processes for project or programme management such as escalation, audit or risk management and risk mitigation.	x		x		
S8: Comply with statutory and organisational safety and security standards and requirements, supporting safety risk assessments and mitigate any risks identified within the design, manufacture, development or test activity.	x				
S9: Identify and use manufacturing processes, resources and technologies to turn the materials, components or other commodities into a finished product or system.				x	
S10: Apply quality management and assurance processes to identify and rectify faults, inaccuracies, discrepancies or unexpected results during the manufacturing engineering process.					
S11: Carry out pre operations checks of engineering manufacturing systems and equipment before use.					
S12: Manage continuous improvement activities using techniques such as Six Sigma, 5s, Kaizen, Lean, Kanban, Statistical Process Control or Value Stream Mapping.					
S13: Create, maintain and review project documentation. Record and action any non-conformities.	x		x		
S14: Communicate with others verbally for example, colleagues and stakeholders.	x		x		
S15: Communicate in writing for example technical reports, documents and presentations.	x		x		
S16: Collaborate with colleagues and stakeholders. Manage differing and competing interests with stakeholders.	x		x		
S17: Identify and complete opportunities for personal and professional development including keeping up to date with current and emerging technology.	x		x		

S18: Apply and promote policies and practices to support equity, diversity and inclusion.	x				
S19: Consider management of change (MOC) requirements when undertaking manufacturing projects or programmes of work.	x		x		
S20: Comply with environmental and sustainability legislation, regulations and standards associated with the manufacturing engineering environment. Uses resources efficiently, for example waste minimisation.		x			
S21: Ensure equipment is managed and maintained.					
S22: Optimise processes and procedures, such as relating to safety, efficiency, performance, productivity and sustainability.		x		x	x
S23: Ensure that all systems or equipment has been correctly configured, checked and tested for safe operation, efficiency and reliability.					
B1: Promotes a healthy and safe working environment.	x		x	x	
B2: Take responsibility for the compliance and quality of work in their area and enable others to meet these standards.	x				
B3: Agile and resilient in dealing with new and changing situations.	x		x		
B4: Supportive of the needs and concerns of others, especially where this relates to diversity and inclusion.	x				
B5: Committed to maintaining and enhancing competence of self and others through Continued Professional Development (CPD).	x				
B6: Acts in an ethical and professional manner.	x		x		
B7: Leads by example and promotes sustainable approaches.	x				

INTENDED LEARNING OUTCOMES – AND HOW THE PROGRAMME ENABLES APPRENTICES TO ACHIEVE AND DEMONSTRATE THE INTENDED LEARNING OUTCOMES

PROGRAMME (LEVEL 6) INTENDED PROGRAMME OUTCOMES

<p>A: Subject knowledge and understanding</p> <p>This programme provides opportunities for apprentices to develop and demonstrate knowledge and understanding of:</p>	<p>The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the programme learning outcomes:</p>
<p>A1 modern engineering technologies and processes for potential application in industry at a professional engineer level;</p> <p>A2 the appropriate analytical and/or computer tools for efficiently and effectively predicting performance in-service;</p> <p>A3 the planning, implementation and presentation of an individual project;</p> <p>A4 business situations with respect to strengths and weaknesses, opportunities and threats and develop ways and means to counteract or exploit such aspects.</p> <p>A5 the importance and benefit of equality, diversity and inclusion, as well as being able to balance the demands of industry against social and environmental impacts identified in the UNSD Goals.</p>	<p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • independent research (for project) (A1-A4); • lectures (A1-A5); • seminars (A1–A5); • practical tutorials (A2, A4); • directed reading (A1, A4, A5); • use of the VLE (A1-A5). <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • individual project (A1-A4); • examination (A1); • coursework (A1–A5).
<p>B: Intellectual skills</p> <p>This programme provides opportunities for apprentices to:</p>	<p>The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the programme outcomes:</p>
<p>B1 approach and implement engineering in a methodical and disciplined manner;</p> <p>B2 evaluate and synthesise information from a number of sources in order to gain a coherent understanding of engineering theory and practice;</p> <p>B3 evaluate critically, and apply scientific knowledge and skills in the development and implementation of practical solutions to complex engineering problems;</p> <p>B4 plan and implement engineering design projects individually and in a group;</p> <p>B5 demonstrate a level and type of education to allow the pursuit of postgraduate research in a related discipline;</p> <p>B6 critically evaluate modern engineering technologies research and future trends.</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> • independent research (for project) (B1- B6); • group exercises (B2, B4); • practical tutorials (B6); • directed reading (B2, B6); • use of the VLE (B1-B6). <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> • individual project (B1-B6); • examination (B2); • coursework (B1–B6)

<p>C: Practical skills</p> <p>This programme provides opportunities for apprentices to:</p>	<p>The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the programme learning outcomes:</p>
<p>C1 identify, understand and employ the appropriate analytical models to solve complex engineering design problems;</p> <p>C2 use highly specialised manual and/or computer-based methods for engineering communication and presentation;</p> <p>C3 be able to employ efficiently advanced modelling, simulation and analysis packages in engineering design;</p> <p>C4 critically review and select engineering materials and material processing methods for the design of components;</p> <p>C5 identify and safely use appropriate laboratory methods;</p> <p>C6 use modern engineering technologies and tools to establish innovative non-routine engineering solutions and adapt engineering designs</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> • individual project (C2, C3, C5, C6); • practical tutorials (C2, C3, C5); • seminars (C4); • use of the VLE (C1-C6). <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> • individual project (C2, C3, C5, C6); • coursework (C1–C6); • examination (C1).
<p>D: Transferable skills</p> <p>This programme provides opportunities for apprentices to:</p>	<p>The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the programme learning outcomes:</p>
<p>communicate effectively and confidently by oral, written and visual means to technical and non-technical audiences;</p> <p>D2 work effectively in collaboration with others, including staff and students;</p> <p>D3 demonstrate creativity in problem solving and the application of knowledge across discipline areas;</p> <p>D4 identify and work towards targets for personal, career, and academic development</p> <p>D5 be independent and reflective learners;</p> <p>D6 use IT including the Web, spreadsheets, presentation and word processing;</p> <p>D7 solve numerical and statistical problems using appropriate techniques.</p>	<p>Learning and teaching strategies and methods:</p> <ul style="list-style-type: none"> • lectures (D1); • individual project (D1, D3-D7); • practical tutorials (D3, D7); • seminars (D1); • group exercises (D1, D2, D6); • use of the VLE (D1 – D7). <p>Assessment strategies and methods:</p> <ul style="list-style-type: none"> • individual projects (D1, D3-D7); • examination (D7); • coursework (D1–D7).

ADMISSION REGULATIONS

The regulations for this programme are the University's Standard Undergraduate Admission Regulations (<https://intranet.bournemouth.ac.uk/pandptest/3a-undergraduate-admissions-regulations.pdf>) with the following exceptions:

Students who have successfully completed the HND in Engineering (Manufacturing) programme at University Centre Newbury with a Pass will be eligible to apply for entry with advanced standing to the Level 6 of the BEng (Hons) Engineering Design (Manufacturing Engineering) programme at Bournemouth University and credited with 120 credits at Level 4 and 120 credits at Level 5.

Additionally, other applicants to Level 6 for the BEng Engineering Design (all pathways) programme require a FdSc, FdEng or HND with Pass in a relevant engineering discipline accredited to EngTech, partial IEng or IEng.

A combination of academic and experiential learning (such as work experience or extra-curricular activities in a relevant field) will be considered on its individual merits and may be acceptable if the applicant does not possess traditional qualifications.

PROGRESSION ROUTES

Partnership arrangements provide formally approved progression routes through which students are eligible to apply for a place on a programme leading to a BU award.

Please find information on Global Partnerships here: [Global partnerships | Bournemouth University](#)

ASSESSMENT REGULATIONS

The regulations for this programme are the University's Standard Undergraduate Assessment Regulations (<https://intranet.bournemouth.ac.uk/pandptest/6a-standard-assessment-regulations-undergraduate.pdf>) with the following approved exceptions to clauses 6.1 and 12.13 to align the programme with the requirements of the IfATE Manufacturing Engineer (degree) apprenticeship standard (ST0025) [Manufacturing engineer \(degree\) / Institute for Apprenticeships and Technical Education](#)

Pass Mark (section 6.1): Where the EPA BEng Project and Professional Discussion-ME unit contains two assessment methods, the individual assessment method grades will be combined to determine the overall EPA grade. Grades from the two individual assessment methods must be combined as specified in the EPA assessment plan to determine the grade of the EPA overall. If the apprentice fails one or more assessment methods, they will be awarded an overall fail. To achieve an overall pass, the apprentice must achieve at least a pass in all the assessment methods. In order to achieve an overall EPA 'distinction', apprentices must achieve a pass in Project with Report, Presentation and Questioning and a distinction in Professional Discussion underpinned by a Portfolio of Evidence. To allow the overall EPA BEng Project and Professional Discussion-ME grade to contribute to degree classification the following marks are applied: Distinction = 75%; Pass = 55%; Fail = 0%.

Provision for failed candidates (section 12): If the apprentice fails one or more assessment method, they can resubmit or repeat at their employer's discretion. The apprentice's employer needs to agree that a resubmission or repeat is appropriate. The maximum time to complete a reassessed or repeated EPA assessment method is 6-months from the EPA outcome notification, otherwise the entire EPA must be completed in full.

Provision for failed candidates (section 12.13): Apprentices will only be allowed one reassessment or repeat attempt.

Also, the following approved exceptions to clauses 7.1 and 7.2 which align the programme with the requirements of The Engineering Council, Accreditation of Higher Education Programmes (AHEP):

COMPENSATION (Section 7)

Compensation may only be applied for up to 20 credits at level 6 and cannot be applied to individual or group project units.

WORK BASED LEARNING (WBL) AND PLACEMENT ELEMENTS

This course is offered to the students/apprentices who are in relevant employment in the engineering industry. All units offer informal opportunity for reflection on current practice at the workplace and further their learning in addition to the taught sessions in the programme.

All students, undertake a number of industry related case studies/projects. These can be carried out within a company or developed within the college/university environment. In both cases the projects involve direct contact with the customer and as such are 'live' projects. When a project is carried, students will normally design and develop a project specified by a company.

Site visits, presentations by and discussions with industry representatives will also ensure that a "real world" understanding of project management is achieved.

Reflective logs are used to facilitate students' learning and encourage the transferability of knowledge between study and the workplace. The units are designed to encourage the students to review what they do at work in light of the UK Standard for Professional Engineering Competence (UK-SPEC), fulfilling the competence and commitment requirements for registration as an Incorporated Engineer (IEng).

All students, undertake an industry related Project at level 6. This can be carried out within a company or developed within the academic environment. In both cases the projects involve direct contact with the customer.

Programme Skills Matrix – BEng (Hons) Engineering Design

Units		Programme Intended Learning Outcomes																							
		A 1	A 2	A 3	A 4	A 5	B 1	B 2	B 3	B 4	B 5	B 6	C 1	C 2	C 3	C 4	C 5	C 6	D 1	D 2	D 3	D 4	D 5	D 6	D 7
L E V E L 6	Advanced Engineering (UCN) (20)	x	x				x	x	x		x	x	x		x	x	x	x	x	x	x		x	x	x
	EPA BEng Project and Professional Discussion-ME (UCN)	x	x	x	x	x	x	x	x		x			x	x		x	x	x		x	x	x	x	x
	Innovation and Professional Practice (UCN) (20)			x	x	x				x	x				x				x	x	x	x	x	x	
	Computational Engineering (UCN) (20)	x	x				x		x		x		x	x	x	x		x	x		x		x	x	x
	Mechatronics (UCN) (20)	x	x				x		x		x		x		x		x		x						x