KEY PROGRAMME INFORMATION

Originating institution(s) Bournemouth University	**Faculty responsible for the programme** Faculty of Science and Technology	
Apprenticeship Standard Product Design and Development Engineer (ST0027)	**Assessment Plan** v1.1 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 (Mechanical Engineering) – Level 6 credits BEng (Hons) Engineering Design (Electrical and Electronic 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** 12
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		

Programme Specification - Section 2

Date of first intake September 2025	**Expected start dates** September
Maximum apprentice numbers NA	
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	
Author Ramesh Marasini (UCN), Nigel Garland (BU)	

PROGRAMME STRUCTURE

Apprentices undertake one of the following pathways depending on their specialisation at Level 5/HND:

Product Design and Development Engineer

Programme Award and Title: BEng (Hons) Engineering Design (Electrical and Electronic Engineering)
BEng (Hons) Engineering Design (Mechanical 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-PDDE (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-PDDE (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 for Product Design and Development Engineer for the top-up BEng (Hons) Engineering Design (Electrical and Electronic or Mechanical Engineering).

Progression requirements:
Students who have successfully completed the HND in Engineering (Mechanical) 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 (Mechanical Engineering) programme at Bournemouth University.

Students who have successfully completed the HND in Engineering (Electrical and Electronic) programmes 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 (Electrical and Electronic Engineering) programme at Bournemouth University.

Exit qualification: Either **BEng (Hons) Engineering Design (Electrical and Electronic Engineering)**
or
BEng (Hons) Engineering Design (Manufacturing Engineering) depending on the discipline specialisation.

Please provide details of the Gateway and End Point Assessment requirements here:

PDDE (ST0027) V1.1- Integrated EPA

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

Method 1: Work-based project report with 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 10 questions covering certain aspects of the learner's occupation

The details of EPA and grading criteria can be found in the EPA Plan for ST0027.

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, and 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.

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 either in Mechanical or Electrical and Electronic pathways will join the top-up programme. UCN will be managing the apprenticeships and Bournemouth University will act as EPAO for the integrated apprenticeship standards. The Knowledge, Skills and Behaviours for the apprenticeship standards, mainly the Product Design and Development Engineer (ST0027), 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:

- Those progressing from UCN HND Engineering (Mechanical) or equivalent will normally complete a project in the Mechanical discipline and graduate with a BEng (Hons) Engineering Design (Mechanical Engineering).
- Candidates progressing from UCN HND Engineering (Electrical and Electronic) or equivalent will normally complete a project in the Electrical and Electronic discipline and graduate with a BEng (Hons) Engineering Design (Electrical and Electronic 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. Product Design and Development Engineer (Integrated)

Exit awards: BEng (Hons) Engineering Design (Electrical and Electronic Engineering)
BEng (Hons) Engineering Design (Mechanical Engineering)

KSB Reference	Innovation & Professional Practice (UCN)	Advanced Engineering (UCN)	EPA BEng Project and Professional Discussion-PDDE (UCN)	Computational Engineering (UCN)	Mechatronics (UCN)
Level	6	6	6	6	6
K1: Safety, environmental, sustainability and security standards associated with product, component or system design, development or modifications and the environments in which they reside.	x		x		x
K2: Hazardous environments and safe systems of work including the impact on the design specification, product, component, system development or modification.	x		x		x
K3: Constraints or limitations when designing, developing, testing or modifying a product, component or system.			x		x
K4: Principles and applications of thermodynamics and fluid dynamics relevant to product design or development.		x		x	
K5: Principles and applications of mechanical dynamic systems relevant to product design or development.				x	
K6: Factors that determine material selection relevant to the appropriate industry sector and product, component or system being designed or developed.			x		
K7: Product design and development life cycle stages.			x		x
K8: Principles of mathematics and scientific methods including analytical techniques required to perform the product design or development engineer role such as evaluating statistical data, complex numbers and matrices.				x	
K9: Principles and applications of electrical, electronic systems and components and digital engineering relevant to product design or development such as analogue to digital conversion, semiconductor devices and circuits, sensors and electric motors.					x
K10: Formats for collecting, presenting and storing data including how to select the best method for conveying complex information, and how to analyse the benefits and risks of each methodology.			x	x	
K11: Commercial nature of projects and how any changes or delays impact on the business.	x		x		
K12: Methods or techniques used for improving or enhancing the safety, reliability, quality, performance and sustainability of products, systems or components such as lean or six sigma.	x	x			
K13: Data acquisition and troubleshooting techniques for diagnosing problems, faults or establishing performance characteristics, supporting improvement opportunities and potential design modifications to systems, products or components.			x	x	x

K14: Ways to access personal and professional development and to maintain vocational currency.	X				
K15: Specific organisational processes used in the research, design and development products, components or systems and how they can be utilised to optimise factors such as safety, efficiency, performance, productivity and sustainability.		X	X		
K16: Quality management and assurance processes.	X		X		
K17: Management of change (MOC) processes of requesting, determining viability, planning, implementing and evaluating changes to a product, system or component. Understand the importance of strict adherence to MOC, and know the limitations when providing MOC approval.	X				
K18: Principles of Computer Aided Design (CAD) tools and Computer Aided Manufacture (CAM) packages.				X	
K19: Principles of simulation tools such as Augmented Reality (AR), Finite Element Analysis (FEA) or assembly simulation with Computer Aided Engineering (CAE) tools.			X	X	
K20: Project management method(s) and principles of how to record project or programmes of work outcomes and metrics to track progress.	X		X		
K21: How advances in technology could impact organisations in the future including factors such as the mechanical and electrical integration, digitalisation, manufacturing systems and in supporting the sustainability agenda such as Industry 4.0.		X			
K22: Workload or time management techniques used to ensure that personal and team objectives are achieved.	X		X		
K23: Different applications and limitations of computer based software system or packages used in the design and development process.				X	X
K24: Benefits of working collaboratively with colleagues and sharing best practice to support business quality and performance measures or issues.	X				
K25: Manufacturing methods used to support the design or development process from concept to production ready products, components or systems.			X		
S1: Translate conceptual ideas or technical requirements into developmental outcomes or operational designs or specifications for products, systems or components to solve engineering challenges such as compliance, technology, technical or physical challenges.			X		X
S2: Select, use and apply approved problem-solving methods to solve complex problems and determine appropriate solutions or actions such as Define, Measure, Analyse, Improve, and Control (DMAIC), Failure Mode Effects Analysis (FMEA) or Plan-Do-Check-Act (PDCA).			X	X	
S3: Collate and use a range of data sources and supporting documentation to support projects.			X		
S4: Interpret and produce technical documentation such as schematic and circuit diagrams, engineering drawings or 3D CAD models, simulation models, project plans, engineering reports, test reports, fault reports or data analytics using company documentation systems and guidelines.			X		X
S5: Observe, record and draw accurate and auditable conclusions from data or developmental or test evidence.				X	X
S6: Manage assigned projects or programmes of work to meet the required specification, taking into account factors such as resource requirements, safety, quality, cost and performance or sustainability criteria. Apply processes for project or programme management including outcomes such as escalation, audit or risk management and risk mitigation.	X		X		
S7: Comply with statutory and organisational safety standards and requirements, supporting safety risk assessments and mitigate any risks identified within the design, manufacture, development or test activity.	X		X		
S8: Identify resources, such as digital tools or technologies, human, equipment, materials or data, to complete design and development projects or programmes of work.			X		X
S9: Create and manage a project or work programme plan and develop activities in a logical process embedding mechanisms for adapting to changing circumstances or requirements.			X		X
S10: Demonstrate leadership when undertaking product design, development, modification or update engineering activities.			X		

S11: Identify and rectify faults, inaccuracies, discrepancies or unexpected results during the design or development process, which may impact the quality and reliability of the product, system or component.	X		X		X
S12: Ensure that all systems or equipment has been correctly configured and checked for safe operation before use.	X				X
S13: Evaluate engineering designs, development or modification options.		X	X		X
S14: Identify areas for improvement and lead continuous improvement activities in the operation and performance of the product, system or component.			X		
S15: Complete project documentation checks throughout the activity and report non-conformances.			X		
B1: Champions a healthy and safe working environment.			X		
B2: Has a quality and compliance mindset.			X		
B3: Uses independent judgement and takes responsibility for decisions.	X		X		
B4: Collaborate and promote teamwork across disciplines.			X		
B5: Is agile, resilient and motivated when faced with change.			X		
B6: Builds relationships in a respectful, collaborative and open and honest way.			X		
B7: Committed to continuous professional development.			X		
B8: Committed to upholding the organisations values, ethics, goals, codes of practice, statutory requirements and standards.	X		X		
B9: Leads by example being an advocate for change and sustainable approaches.	X		X		

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

PROGRAMME (LEVEL 6) INTENDED PROGRAMME OUTCOMES

<table>
<tr><td>A: Subject knowledge and understanding

This programme provides opportunities for apprentices to develop and demonstrate knowledge and understanding of:</td><td>The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the programme learning outcomes:</td></tr>
<tr><td rowspan="2">A1 modern engineering technologies and processes for potential application in industry at a professional engineer level;

A2 the appropriate analytical and/or computer tools for efficiently and effectively predicting performance in-service;

A3 the planning, implementation and presentation of an individual project;

A4 business situations with respect to strengths and weaknesses, opportunities and threats and develop ways and means to counteract or exploit such aspects.

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.</td><td>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):

• 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).</td></tr>
<tr><td>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):

• individual project (A1-A4);
• examination (A1);
• coursework (A1–A5).</td></tr>
<tr><td>B: Intellectual skills

This programme provides opportunities for apprentices to:</td><td>The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the programme outcomes:</td></tr>
<tr><td rowspan="2">B1 approach and implement engineering in a methodical and disciplined manner;

B2 evaluate and synthesise information from a number of sources in order to gain a coherent understanding of engineering theory and practice;

B3 evaluate critically, and apply scientific knowledge and skills in the development and implementation of practical solutions to complex engineering problems;

B4 plan and implement engineering design projects individually and in a group;

B5 demonstrate a level and type of education to allow the pursuit of postgraduate research in a related discipline;

B6 critically evaluate modern engineering technologies research and future trends.</td><td>Learning and teaching strategies and methods:

• independent research (for project) (B1- B6);
• group exercises (B2, B4);
• practical tutorials (B6);
• directed reading (B2, B6);
• use of the VLE (B1-B6).</td></tr>
<tr><td>Assessment strategies and methods:

• individual project (B1-B6);
• examination (B2);
• coursework (B1–B6)</td></tr>
</table>

C: Practical skills This programme provides opportunities for apprentices to:	The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the programme learning outcomes:
C1 identify, understand and employ the appropriate analytical models to solve complex engineering design problems; **C2** use highly specialised manual and/or computer-based methods for engineering communication and presentation; **C3** be able to employ efficiently advanced modelling, simulation and analysis packages in engineering design; **C4** critically review and select engineering materials and material processing methods for the design of components; **C5** identify and safely use appropriate laboratory methods; **C6** use modern engineering technologies and tools to establish innovative non-routine engineering solutions and adapt engineering designs	Learning and teaching strategies and methods: • individual project (C2, C3, C5, C6); • practical tutorials (C2, C3, C5); • seminars (C4); • use of the VLE (C1-C6). Assessment strategies and methods: • individual project (C2, C3, C5, C6); • coursework (C1–C6); • examination (C1).
D: Transferable skills This programme provides opportunities for apprentices to:	The following learning and teaching and assessment strategies and methods enable apprentices to achieve and to demonstrate the programme learning outcomes:
communicate effectively and confidently by oral, written and visual means to technical and non-technical audiences; **D2** work effectively in collaboration with others, including staff and students; **D3** demonstrate creativity in problem solving and the application of knowledge across discipline areas; **D4** identify and work towards targets for personal, career, and academic development **D5** be independent and reflective learners; **D6** use IT including the Web, spreadsheets, presentation and word processing; **D7** solve numerical and statistical problems using appropriate techniques.	Learning and teaching strategies and methods: • lectures (D1); • individual project (D1, D3-D7); • practical tutorials (D3, D7); • seminars (D1); • group exercises (D1, D2, D6); • use of the VLE (D1 – D7). Assessment strategies and methods: • 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://intranetsp.bournemouth.ac.uk/pandptest/3a-undergraduate-admissions-regulations.pdf) with the following exceptions:

Apprentices who have successfully completed the HND in Engineering (Mechanical) 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 (Mechanical Engineering) programme at Bournemouth University.

Apprentices who have successfully completed the HND in Engineering (Electrical and Electronic) programmes 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 (Electrical and Electronic Engineering) programme at Bournemouth University

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.

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://intranetsp.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 Product Design and Development Engineer (degree) apprenticeship standard (https://www.instituteforapprenticeships.org/apprenticeship-standards/st0027-v1-1):

Pass Mark (section 6.1): Where the EPA BEng Project and Professional Discussion-PDDE 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 'merit', apprentices must achieve a distinction in one of the assessment methods and a pass in the other assessment method. In order to achieve an overall EPA 'distinction', apprentices must achieve a distinction in both assessment methods. To allow the overall EPA BEng Project and Professional Discussion-PDDE grade to contribute to degree classification the following marks are applied: Distinction = 75%; Merit = 65%; 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 work place 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
LEVEL 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-PDDE (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	
	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