

KEY PROGRAMME INFORMATION

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| <p>Originating institution(s) Bournemouth University</p> | <p>Faculty responsible for the programme Faculty of Science and Technology</p> |
| <p>Final award(s), title(s) and credits</p> <p>Engineering Foundation Year Certificate (120 Credits / 60 ECTS)</p> <p>Students undertaking this Year 0 Foundation Year will be enrolled directly on one of the following awards:</p> <p>Note: Final award at Level 6 listed below will not contain “(with Foundation Year Certificate)” on the student’s transcript.</p> <p>BSc (Hons) Design Engineering (with Foundation Year Certificate) BEng (Hons) Mechanical Engineering (with Foundation Year Certificate)</p> <p>120 (60 ECTS) Level 0 / 120 (60 ECTS) Level 4 / 120 (60 ECTS) Level 5 / 120 (60 ECTS) Level 6 credits</p> <p>MEng (Hons) Mechanical Engineering (with Foundation Year Certificate)</p> <p>120 (60 ECTS) Level 0 / 120 (60 ECTS) Level 4 / 120 (60 ECTS) Level 5 / 120 (60 ECTS) Level 6 credits / 120 (60 ECTS) Level 7</p> | |
| <p>Intermediate award(s), title(s) and credits</p> <p>Students who achieve a minimum of 80 credits at Level 0 will be awarded a Foundation Year Certificate</p> <p>Students who achieve 120 credits at Level 0 and 120 credits at Level 4 will be awarded a Cert HE in the subject of the named award upon which they are enrolled</p> <p>Cert HE Design Engineering–120 (60 ECTS) Level 0 / 120 (60 ECTS) Level 4 credits Cert HE Mechanical Engineering – 120 (60 ECTS) Level 0 / 120 (60 ECTS) Level 4 credits</p> <p>Students who achieve 120 credits at Level 0, 120 credits at Level 4 and 120 Credits at Level 5 will be awarded a Dip HE in the subject of the named award upon which the are enrolled.</p> <p>Dip HE Design Engineering –120 (60 ECTS) Level 0 / 120 (60 ECTS) Level 4 / 120 (60 ECTS) Level 5 credits Dip HE Mechanical Engineering –120 (60 ECTS) Level 0 / 120 (60 ECTS) Level 4 / 120 (60 ECTS) Level 5 credits</p> <p>Students who achieve 120 credits at Level 0, 120 credits at Level 4, 120 Credits at Level 5 and 120 credits at Level 6 will be awarded a BEng (Hons) degree if they are enrolled on MEng (Hons) Mechanical Engineering</p> <p>BEng (Hons) Mechanical Engineering – 120 (60 ECTS) Level 4 / 120 (60 ECTS) Level 5 credits / 120 (60 ECTS) Level 6 credits</p> | |

Programme Specification – Section 1

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| <p>UCAS Programme Code(s) (where applicable and if known) H099 leading to: H100 H104 leading to H105 H304 leading to H305</p> | <p>HECoS (Higher Education Classification of Subjects) Code and balanced or major/minor load. Foundation Certificate: 101274 (50%), 100190 (50%) leading to: 100048 (20%), 100182 (80%); 100190 (100%)</p> |
| <p>External reference points For the Foundation Certificate: QAA UK Quality Code for HE (2018) SEEC descriptors Aligned with the NQF level 3 as a reference point for learning outcomes although this for level 0 https://www.gov.uk/what-different-qualification-levels-mean/list-of-qualification-levels Subject benchmark statement - Engineering (2019)</p> <p>External reference points for the level 4 programmes listed above can be found in the relevant documentation</p> | |
| <p>Professional, Statutory and Regulatory Body (PSRB) links The Foundation Certificate does not have PSRB links as it is designed to allow entry onto different programmes. The programmes listed above, from Level 4 onwards, are accredited by the Institution of Engineering Designers (IED) and the Institution of Mechanical Engineers (IMechE). The details of each set of conditions can be found in each relevant programme documentation.</p> | |
| <p>Places of delivery Bournemouth University campus</p> | |
| <p>Mode(s) of delivery Full Time</p> | <p>Language of delivery English</p> |
| <p>Typical duration 12 months full-time</p> | |
| <p>Date of first intake September 2022</p> | <p>Expected start dates September</p> |
| <p>Maximum student numbers n/a</p> | <p>Placements n/a for Foundation Certificate</p> |
| <p>Partner(s) n/a</p> | <p>Partnership model</p> |
| <p>Date of this Programme Specification July 2022</p> | |
| <p>Version number 1.0-0923</p> | |
| <p>Approval, review or modification reference numbers E212226 EC 2122 82</p> | |
| <p>Author Professor Philip Sewell</p> | |

Programme Specification – Section 1

PROGRAMME STRUCTURE

| Programme Award and Title: Engineering Foundation Year Certificate | | | | | | | | |
|---|-----------------|-------------------|-------------------------------|----------|----------|--|------------------------|--|
| Year 1/Level 0 Students are required to complete 6 core units. | | | | | | | | |
| Unit Name | Core/ Option | No. of Credits | Assessment Element Weightings | | | Expected Contact hours per unit | Unit Version No. | HECoS Code (plus balanced or major/ minor load) |
| | | | Exam 1 | Cwk 1 | Cwk 2 | | | |
| Academic Study Skills for Engineering and Technology | Core | 20 | | 100 | | 36 | V1.0 | 101088 |
| Introduction to Computers | Core | 20 | | 100 | | 36 | V1.0 | 100358 |
| Mathematics for Engineering and Technology | Core | 20 | | 40 | 60 | 36 | V1.0 | 100403 |
| Introduction to Engineering Science | Core | 20 | 60 | 40 | | 36 | V1.0 | 100190 |
| Introduction to Computer-Aided Design Tools | Core | 20 | | 50 | 50 | 36 | V1.0 | 100160 |
| Foundation Year Engineering and Technology Project | Core | 20 | | 50 | 50 | 36 | V1.0 | 100812 (50%) 100392 (50%) |
| <p>Progression requirements: In order to progress to level 4 for the programmes listed below, students must successfully complete 120 credits (60 ECTS) at Level 0:</p> <p>BSc (Hons) Design Engineering BEng (Hons) Mechanical Engineering MEng (Hons) Mechanical Engineering</p> <p>Exit qualification: Students who achieve a minimum of 80 credits at Level 0 will be awarded an Engineering Foundation Year Certificate.</p> | | | | | | | | |

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

Students will be enrolled on the named award that they have applied for. However, at the end of Level 0 students can transfer to another named award using the APL system.

BU currently runs successfully validated versions of the 3 programme titles, listed on page 1, at levels 4, 5, 6 and 7 (MEng). The university now wishes to include a new Engineering Foundation Certificate Level 0, specifically designed to widen access for those applicants holding UCAS points lower than our advertised tariff or Clearing tariff. This will allow applicants to join one of the 3 programmes listed. It will prepare them for study at levels 4, 5, 6 and 7 by introducing them to six 20 credit units at level 0. Successful completion of the foundation level will allow those who do not meet the A level mathematics and science requirement entry to BEng and MEng (Hons) Mechanical Engineering.

This programme allows for a seamless transition from level 0 to level 4, level 5, placement year (optional) culminating at level 6 or level 7 (MEng) in the award of an Honours Degree or level. The units described build the students' skills base in academic skills and engineering. The *Academic Study Skills for Engineering and Technology* unit will align closely with the topics within these four units and the *Foundation Year Engineering and Technology Project* will consolidate their learning into one final piece of work.

This Foundation Certificate forms part of a suite of degree programmes within the Faculty of Science and Technology. It promotes BU's commitment to widening participation by acknowledging that students with potential to succeed at degree level may come from a wide range of backgrounds and educational experiences requiring a different HE environment to do so.

Students on this particular course will fall into three major categories:

- Mature students returning to full-time education often with a mix of vocational experience and qualifications;
- Students who have either non-subject appropriate A Levels or lack appropriate A Levels or equivalent qualifications for their chosen degree course;
- Students who have been identified as having potential to undertake such subjects but who would benefit from an additional year of study to realise this potential.

The main aims of the Foundation Certificate are:

- Develop the students' knowledge and understanding of facts, concepts and principles in the area of Engineering;
- Develop the students' understanding of academic, mathematics and computing skills;
- Develop the students' understanding of project work;
- Prepare the students for progression into level 4 of their chosen degree course.

The six units presented here are designed to reinforce and substitute for a previous lack of knowledge which BU expects of a level 4 entry applicant. By spending one academic year consolidating Level 0 students' skills and knowledge, the aim is to raise their standards and prepare them for Levels 4, 5, 6 and 7 (MEng) study.

This Foundation Certificate programme aims to provide students with the best opportunity to excel at levels 4, 5, 6 and 7 (MEng) contributing to BU's ambition to develop highly employable graduates. A list of graduate attributes for each of the 3 programmes can be found in the previously validated documents for those programmes.

Programme Specification - Section 2

The foundation level will have a Programme Leader who will actively support the pastoral needs of the cohort recognising their diverse backgrounds. Where possible, the academic advising team, supporting the Programme Leader, will be selected to be empathetic to the diversity of the cohort and encourage inclusivity. A strong academic adviser strategy will complement the pastoral support and learning to ensure students settle into study methods with a strong emphasis on ownership of the learning and encouraging self-study. The Academic Advisor will remain with the student throughout their journey at BU.

ALIGNMENT WITH THE UNIVERSITY'S STRATEGIC PLAN

This programme contributes to the university's plan for widening participation as part of its BU2025 strategic plan.

LEARNING HOURS AND ASSESSMENT

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

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

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

STAFF DELIVERING THE PROGRAMME

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

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

LEVEL 0 ENGINEERING FOUNDATION YEAR CERTIFICATE INTENDED PROGRAMME OUTCOMES

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|---|---|
| <p>A: Subject knowledge and understanding</p> <p>This programme provides opportunities for students to develop and demonstrate knowledge and understanding of:</p> | <p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:</p> |
| <p>A1 Understand the basic concepts, principles and theories of Engineering, Computing and Mathematics;</p> <p>A2 Develop understanding of appropriate techniques to solve basic engineering problems;</p> <p>A3 Possess an ability to carry out engineering calculations;</p> <p>A4 Understand the basics of Computer Aided Design (CAD);</p> <p>A5 Understand the global context of engineering.</p> | <p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • lectures (A1 – A5); • seminars (A1 – A5); • directed reading (A1-A3, A5); • use of the VLE (A1-A5); • independent research (A2-A5). <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • coursework (A1-A5); • project (A1- A5). |
| <p>B: Intellectual skills</p> <p>This programme provides opportunities for students to:</p> | <p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme outcomes:</p> |
| <p>B1 Apply learning to a range of subject-related tasks in Engineering, Computing and Mathematics;</p> <p>B2 Develop engineering problem solving skills;</p> <p>B3 Analyse data to yield analytical information;</p> <p>B4 Critically evaluate theory and practice;</p> <p>B5 Evaluate problems and solutions in the context of the United Nations Sustainable Development Goals (UNSDGs).</p> | <p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • lectures (B1 – B5); • seminars (B1 – B5); • laboratories (B3, B4); • directed reading (B1, B2, B4, B5); • use of the VLE (B1-B5); • projects (B1-B5). |

Programme Specification - Section 2

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| | <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • coursework (B1 – B5); • laboratory reports (B3, B4); • projects (B1 – B5). |
| <p>C: Practical skills</p> <p>This programme provides opportunities for students to:</p> | <p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:</p> |
| <p>C1 Understand and apply subject learning in key academic skills using a range of software packages;</p> <p>C2 Analyse data and determine their strength and validity;</p> <p>C3 Prepare and present laboratory reports using appropriate skills;</p> <p>C4 Become competent in the use of Computer Aided Design (CAD).</p> | <p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • lectures (C1 – C4); • projects (C1 – C4); • group exercises (C1 – C3). <hr/> <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • coursework (C1- C4); • laboratory reports (C3). |
| <p>D: Transferable skills</p> <p>This programme provides opportunities for students to:</p> | <p>The following learning and teaching and assessment strategies and methods enable students to achieve and to demonstrate the programme learning outcomes:</p> |
| <p>D1 Develop confidence in interpersonal skills including collaboration, active listening, socio-emotional intelligence, and presentations;</p> <p>D2 Communicate effectively using verbal and / or non-verbal means including receiving, responding to and presenting information in a variety of forms;</p> <p>D3 Gain confidence in own ability to understand and reflect on the importance of autonomy, responsibility and resilience in study and work.</p> | <p>Learning and teaching strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • lectures/seminars (D1 - D3); • use of the VLE (D1 - D3); • group exercises (D1 – D3). <hr/> <p>Assessment strategies and methods (referring to numbered Intended Learning Outcomes):</p> <ul style="list-style-type: none"> • coursework (D1 – D3); • projects (D1- D3). |

Programme Specification - Section 2

Programme Skills Matrix

| 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 | C 1 | C 2 | C 3 | C 4 | D 1 | D 2 | D 3 |
| L E V E L 0 | Academic Study Skills for Engineering and Technology | | X | | | X | X | X | X | X | X | X | X | | | X | X | X |
| | Introduction to Computers | X | X | | | | X | X | | | | X | | | | | | X |
| | Mathematics for Engineering and Technology | X | X | | | | X | X | X | | | | X | | | | | X |
| | Introduction to Engineering Science | X | X | | | | X | X | X | X | | | X | X | | | | X |
| | Introduction to Computer-Aided Design Tools | X | | X | X | | X | | | | | X | | | X | | X | X |
| | Foundation Year Engineering and Technology Project | X | X | | | X | X | X | X | X | X | X | X | | | X | X | X |

A – Subject Knowledge and Understanding

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

1. Understand the basic concepts, principles and theories of Engineering, Computing and Mathematics;
2. Develop understanding of appropriate techniques to solve basic engineering problems;
3. Possess an ability to carry out engineering calculations;
4. Understand the basics of Computer Aided Design (CAD);
5. Understand the global context of engineering.

C – Subject-specific/Practical Skills

This programme provides opportunities for students to:

1. Understand and apply subject learning in key academic skills using a range of software packages.
2. Analyse data and determine their strength and validity;
3. Prepare and present laboratory reports using appropriate skills;
4. Become competent in the use of Computer Aided Design (CAD).

B – Intellectual Skills

This programme provides opportunities for students to:

1. Apply learning to a range of subject-related tasks in Engineering, Computing and Mathematics;
2. Develop engineering problem solving skills;
3. Analyse data to yield analytical information;
4. Critically evaluate theory and practice;
5. Evaluate problems and solutions in the context of the United Nations Sustainable Development Goals (UNSDGs).

D – Transferable Skills

This programme provides opportunities for students to:

1. Develop confidence in interpersonal skills including collaboration, active listening, socio-emotional intelligence, and presentations.
2. Communicate effectively using verbal and / or non-verbal means including receiving, responding to and presenting information in a variety of forms.
3. Gain confidence in own ability to understand and reflect on the importance of autonomy, responsibility and resilience in study and work.

ADMISSION REGULATIONS

Please refer to the course website for further information regarding admission regulations for this programme: [Foundation Year | Bournemouth University](#)

PROGRESSION ROUTES

Not applicable

ASSESSMENT REGULATIONS

The regulations for this programme are the University's Standard Foundation Year Assessment Regulations and the University's Standard Undergraduate [Assessment Regulations](#).

WORK BASED LEARNING (WBL) AND PLACEMENT ELEMENTS

The Foundation Certificate does not provide students with a placement opportunity. Bournemouth university undergraduate degree programmes embed a range of placement learning opportunities, including 30 week sandwich placements, shorter placements and practice placements for some regulated programmes. See the relevant programme specification for specific details.