

Engineering Foundation Year Programme Specification

Academic Year:	2020-21
Degree Awarding Body:	University of Bradford
Final and interim award(s):	Certificate of Engineering Foundation Studies [Qualifications and Credit Framework (QCF) /National Qualification and Credit Framework (NQF) Level 3 award]
Programme duration:	1 year
UCAS code:	H101
QAA Subject benchmark statement(s):	Engineering
Date last confirmed and/or minor modification approved by Faculty Board	March 2019; September 2020

Please note: This programme specification has been published in advance of the academic year to which it applies. Every effort has been made to ensure that the information is accurate at the time of publication, but changes may occur given the interval between publishing and commencement of teaching. Any change which impacts the terms and conditions of an applicant's offer will be communicated to them. Upon commencement of the programme, students will receive further detail about their course and any minor changes will be discussed and/or communicated at this point.

Introduction

The Engineering Foundation Year is designed to give students the necessary knowledge and skills to continue their education in Engineering or Technology undergraduate programmes.

Programme Aims

The programme is intended to prepare students with appropriate qualifications so that they can enter into Stage 1 of a CEng accredited Engineering programme at the University of Bradford.

Students can take the Engineering Foundation Year as a 'stand-alone' programme and, if successful, use it as an entry qualification for admission to programmes at other Universities. In this case they will be awarded the Certificate of Engineering Foundation Studies.

Students who enter the Foundation Year are usually intending to seek a career as Chartered Engineers within one of the Engineering Professions: Civil, Mechanical, Automotive, Chemical or Medical Engineering.

Programme Learning Outcomes

To be eligible for the award of Certificate of Foundation Studies at QCF/NQF Level 3, students will have:

- LO1 Knowledge and understanding of mathematics, mechanics, physics, materials and chemistry to an appropriate standard to allow students to enter a CEng accredited programme.
- LO2 Knowledge and skills in the use of computers for word processing, report writing, data processing, power-point presentation, Computer Aided Design; numerical methods for understanding, simple modelling and analysing engineering problems relevant to their chosen specialism; selection and application of principles and data collection & manipulation methods to support problem solving; undertake and report an investigation.
- LO3 Knowledge and skills in data management and presentation, IT and communication skills, systematic problem solving, lifelong learning, scientific method, teamwork, and personal management.

Curriculum

The map of the curriculum which students will study on the programme is detailed below. The stage comprises of 2 semesters with 60 credits being studied in each semester. Each subject is delivered in a 20 credit module which may be linked through both semesters.

Module code	Module title Engineering	Type	Credits	Level	Study Period
ENM3001-B	Foundation Mathematics 1	C	20	3	1
ENM3002-B	Foundation Mathematics 2	C	20	3	2
MAE3001-B	Foundation Mechanics	C	20	3	1, 2
MAE3002-B	Foundation Physics	C	20	3	1, 2
MAE3003-B	Fundamentals of Materials	C	20	3	1, 2
ENB3001-B	Information and Communication Technology	C	20	3	1, 2

Modules studied are: Mathematics, Mechanics, and Physics, to A2 level, and Fundamentals of Materials to AS level. There are also 20 credits modules designed to introduce students to the use of Information and Communication Technologies within the context of the Engineering profession. A feature of the year is the practical elements of the programme where students spend time in the laboratories to conduct experiments on various engineering applications. Students will be able to develop an awareness of the breadth of

opportunities and challenges posed by engineering and the exciting possibilities for their career development.

The curriculum may change, subject to the University's programme approval, monitoring and review procedures.

At the end of the programme, students will be eligible to exit with the award of Certificate of Foundation Studies if they have successfully completed 120 Level 3 QCF/NQF credits and achieved the specified learning outcomes.

Learning and Teaching Strategy

Students will experience a wide range of teaching and learning environments. Concepts, principles and theories are generally explored in formal lectures, practised in associated tutorials and demonstrated in laboratory classes. Practical skills are developed in laboratories. Cognitive and personal skills are developed in more open-ended problem solving and design exercises, often tackled by working in small groups supported by members of academic, technical and library staff. Project work is used to bring various aspects of the programme together.

Typically, each module will involve students in 72 hours of class contact except Mathematics. Students will have 96 hours of class contact in the Mathematics modules. An expected weekly commitment will be around 21 hours.

Assessment Strategy

Methods of Assessment are similarly varied and students' progress will be assessed using a mix of formal examinations, tests, laboratory reports, and oral presentation.

Assessment Regulations

This Programme conforms to the standard University Assessment Regulations which are available at the link: <https://www.bradford.ac.uk/regulations/>

However, there are exception(s) to these regulations as listed below:

To proceed to Stage 1 of any accredited MEng Engineering programme at the University of Bradford, students are required to achieve a "Distinction" with an overall average of 70%.

Admission Requirements

The University welcomes applications from all potential students and most important in the decision to offer a place is our assessment of a candidate's potential to benefit from their studies and of their ability to succeed on this particular programme. Consideration of applications will be based on a combination of formal academic qualifications and other relevant experience.

The minimum entry requirements for the programme are as follows:

A typical offer to someone seeking entry through the UCAS scheme would be 72 UCAS points, a minimum of GCSE Maths grade B/grade 6 and GCSE English grade D/grade 3 (equivalents accepted) although having post GCSE Maths and/or Physics (A level) would be an advantage.

On completion of a UCAS form potential students will be invited to the School for an Experience

Day when they will have the opportunity to meet staff, view the facilities and discuss “the Bradford experience” with current students.

The UCAS tariff applicable may vary and the programme details are published here:
<http://www.bradford.ac.uk/study/courses/info/engineering-with-foundation-year-beng>

Applications are welcome from students with non-standard qualifications or mature students (those over 21 years of age on entry) with significant relevant experience.

Recognition of Prior Learning

If applicants have prior certificated learning or professional experience which may be equivalent to parts of this programme, the University has procedures to evaluate and recognise this learning.

Minor Modification Schedule

Version Number	Brief description of Modification	Date of Approval (Faculty Board)
2	Removal of enhanced pass waivers	13/09/2016 (CA)
3	Changes to admissions requirements	March 2019
4	Specification reformatted and made accessible	December 2020