University Foundation Studies in Engineering

In all Brunel University London Law degrees, students develop a range of skills valued by employers such as critical thinking, analysis and communication. Each programme has a strong contemporary feel and relates law theory and concepts to the practical issues of 21st Century legal practices. Successful completion of the degree can lead to career opportunities in law, mediation, public administration, management, industry and commerce.

In Stage 1 of the programme you will take the following core modules, four in the first semester and four in the second.

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Module Overview

Interactive Learning Skills and Communication
This module will help you learn how to study effectively at University. Students will be introduced to techniques and strategies to help support and enhance your learning at undergraduate level.

Mathematics for Engineers 1
This module aims to introduce students to the basic concepts and application of mathematics for engineers.

Physics for Engineers
The aim of this module is to introduce students to the basic laws of physics.

ICT and Programming Techniques
The first semester introduces students to software and the development of ICT in Engineering. The second semester introduces students to basic programing language and requires students to write a simple program for assessment by the end of the module. Students will be introduced to different languages and to CAD/CAM.

Engineering Concepts
This module aims to give students the opportunity to research into their chosen Engineering product or service using a range of tools and methods to support the outcomes. Semester 1 introduces students to the theoretical concepts of civil, electronics and electrical and mechanical Engineering. Semester 2 will focus upon core concepts and each student will produce an individual report on a discipline specific project.

Mathematics for Engineers 2
This module aims to introduce students to basic number theory. Students will be able to recall and define numerical techniques associated with basic number theory; Cartesian coordinates; indices; logarithms; polynomial equations; quadratic equations; simultaneous equations; sequences; geometric progressions; differentiation and integration.

Physics for Engineers 2
The aim of this module is to introduce students to the basic laws of physics and the relationship to technology, Engineering and the environment.

Problem Solving, Creative Thinking and Analytical Skills
The principle aim of this module is to develop understanding and application in a range of methods of investigation relevant to the Engineering profession. The module is designed to develop in students the ability to problem solve, think critically, creatively and innovatively about Engineering, think laterally in regards to problem solving using case studies as well as using analytical techniques developed throughout the Level 0 in Engineering.