Electronics and Electrical Engineering

University of Edinburgh

Venues

King's Buildings Campus

Content

Year 1
You will learn the fundamental concepts in electronics and electrical engineering that provide the basis for more advanced study in later years, including a project laboratory. This is supplemented by important mathematics allowing the engineering concepts to be properly explored and explained. There is also an opportunity to select from a wide variety of courses from across the University, allowing you to widen your interests.

Year 2
The broad area of electronics and electrical engineering is broken down in Year 2, so that you study a wider range of courses reflecting the types of engineering often encountered. You will study courses in analogue circuit design, digital system design, microelectronic devices, communication systems and power engineering.

Alongside these courses are hardware project laboratories supporting the taught material and a practical course in software programming. Mathematics courses include some of the more advanced mathematical techniques necessary. Industrial Management is also taught so graduate engineers can be well prepared for all aspects of their future careers.

Year 3
The thematic areas developed are continued into Year 3. You will also learn about electromagnetics and control engineering. There are project laboratories in digital systems design, analogue mixed signal design and embedded software, and there is also a laboratory in electrical machines and another in control engineering. You will learn about the economic and technical aspects of supplying power in the Power System Design Group Project.

Year 4
You will continue to develop your skills in those themes where you have developed a keen interest in previous years by selecting from a range of option courses. Courses in bioelectronics are also available. At least one third of the year is practical, with some of the option courses providing additional practical experience.

The highly motivational Group Design Project is multidisciplinary and you will be working with peers from other engineering disciplines to complete a design and report that mimics the way practicing engineers work together in teams.

You will also begin your major project that will span Years 4 and 5. If you are undertaking an industrially sponsored project on placement, it will normally be conducted on the company premises. Students undertaking an internal project will work in the University.

Year 5

The ability to select courses according to interest is continued into Year 5, and again, many of the courses are dominated by practical project work. These courses are taken after the completion of the project. This phase of the project represents half of the year's work, making Year 5 dominated by the application of learned knowledge to practical situations.

Start Date

September

Qualification

Degree

Study Method

Full time

Award Title

MEng

UCAS Code

H601

Course Length

5 years

Faculty

College of Science and Engineering

Department

Engineering

Entry Requirements

2026 entry requirements

Standard entry:
4 Highers at AAAA (by end of S5 preferred) including Maths at A and one from Biology, Chemistry, Computing Science, Engineering Science or Physics (preferred) plus National 5 Engineering Science or Physics at B and English at C.

For direct entry to year 2 you would require 2 Advanced Highers at AA including Maths plus 2 further Highers at AB including Engineering Science, Physics or another technological subject.

Widening access entry:
4 Highers at AABB (two sittings) including Maths at A and one from Biology, Chemistry, Computing Science, Engineering Science or Physics (preferred) plus National 5 Engineering Science or Physics at B and English at C. Highers at BBB must be achieved in one sitting.

SCQF Level

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Progression Routes

«ProgressionRoutes»

Combination Courses

«htmlCombinationCourse» «htmlCombinationUCASCode»

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