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 will 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.

You will work on your individual honours project throughout the year, and it forms the single most important practical work of the programme.

You will be working with a project supervisor, and your project will probably be linked to the research activity of the supervisor, meaning you are exposed to, and have opportunity to contribute to, the research output of the School.

Start Date

September

Qualification

Degree

Study Method

Full time

Award Title

BEng Hons

UCAS Code

H600

Course Length

4 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

10

Progression Routes

«ProgressionRoutes»

Combination Courses

«htmlCombinationCourse» «htmlCombinationUCASCode»

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