Physics

University of Edinburgh

Venues

King's Buildings Campus

Content

Physics is the study of the fundamental processes of our Universe, and its laws underpin the other natural sciences.

This flexible BSc Physics programme reflects this central role. The programme covers all aspects of physics, from the very basics to the current frontiers of knowledge.

Year 1
You will study compulsory courses in physics and mathematics. Physics 1A presents the pillars of physics upon which subsequent material is based and will develop your problem solving and study skills. It is innovative in its use of technology and offers an interactive learning experience.

Physics 1B introduces you to a wide range of physics topics, including waves, introductory quantum mechanics, nuclear and particle physics and how these impact our understanding of the universe. It also includes an introduction to university laboratory work.

You will study Mathematics for Physics 1 and 2 which include mathematical and problem solving skills in the context of algebra and calculus, with increasing emphasis on physical applications.

You will be able to choose two further subjects from other academic areas.

Year 2
You will study modern physics and physics of fields and matter. Supporting mathematics courses will cover algebra, calculus, dynamics and vector calculus and you will be introduced to practical physics, including programming, data analysis and experimental techniques.

Students entering the programme in Year 2 will take additional introductory courses in classical physics and mathematics.

Students will have the freedom to choose one or two courses from other academic areas.

Year 3
You will study thermodynamics, statistical mechanics, electromagnetism, optics and quantum mechanics.

Students will have access to an experimental laboratory and research methods course, as well as the opportunity to take a computational modelling or numerical computation course.

Year 4
In this year there are compulsory courses covering relativity, nuclear and particle physics, and condensed matter physics. Students also take project work and a course in experimental techniques, as well as selecting a number of further courses from a range available.

Start Date

September

Qualification

Degree

Study Method

Full time

Award Title

BSc Hons

UCAS Code

F300

Course Length

4 years

Faculty

College of Science and Engineering

Department

Physics and Astronomy

Entry Requirements

2027 entry requirements

Standard entry:
4 Highers at AAAA (by end of S5 preferred) including Maths and Physics plus English at National 5. Advanced Higher Maths is recommended.

Direct entry to year 2 is possible with 3 Advanced Highers at AAA including Maths and Physics plus the above.

Widening access entry:
4 Highers at AABB (by end of S6) including Maths at A and Physics plus English at National 5. Advanced Higher Maths is recommended. Highers at BBB must be achieved in one sitting.

SCQF Level

10

Progression Routes

«ProgressionRoutes»

Combination Courses

«htmlCombinationCourse» «htmlCombinationUCASCode»

Address

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Website

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