Physics
Undergraduate study
Why study physics at Bristol?

Physics at Bristol is delivered in a groundbreaking research environment where you learn from experts bringing their latest work into the teaching lab. This means your lectures might be with a particle physicist analysing the latest data from CERN’s Large Hadron Collider, or with an astrophysicist looking at data from the Hubble Space Telescope.

Our strong links with industry leaders in communications, IT, defence and energy offer you exciting opportunities for a year in industry and final-year projects. Recent industry partners include Bristol Zoo, Siemens, Sellafield and The Fat Duck. We focus on your future during your course with physics-specific employability sessions, giving you valuable presentation, interview and networking experience.

We have an international reputation for producing notable innovators, such as Nobel laureates Professor Cecil Powell and Sir Nevill Francis Mott, and many current pioneers. These include Professor Sir Michael Berry, a theoretical physicist investigating new frontiers in waves and chaos theory; Professor Sandu Popescu, who designed the first teleportation experiment; Dr Zoe Leinhardt, a computational astrophysicist researching the formation of planets and small bodies; and Dr Annela Seddon, a Nanophysicist investigating the fabrication of materials on the nanoscale.

Our students describe the environment in Bristol as friendly and supportive. You will benefit from top-class facilities too, including our £7 million undergraduate teaching labs, a six-metre radio telescope for astrophysics research and a high-performance supercomputer. We support your learning with extensive online resources, group study spaces and recorded lectures.

Illin (MSci Physics)

‘Everyone, from the students to the staff, is as passionate about physics as you are. The lecturers and tutors treat their students as equals and have more than enough patience to answer all questions that a curious student might have.’

Illin (MSci Physics)
Physics is an exciting intellectual challenge. Key features of a Bristol physics degree are flexibility and choice. You can normally transfer between courses in the first two years, and a range of interesting options in the final year means you can specialise in your chosen field or take a more general approach. You might choose to spend time working in industry on placement or on a project, or perfect your language skills with a year at a partner university abroad.

Our degree courses are challenging and designed to develop your abilities, encouraging you to become a critical thinker. We take a rigorous approach to problem solving, teamwork, experiment and communication skills, and you will gain confidence in handling and interpreting numerical information.

We produce graduates with practical skills as well as theoretical knowledge, so you will spend a large part of your degree designing and developing experiments in a large, bright, purpose-built teaching laboratory.

Our teaching formats include large lectures, individual computational work and laboratory work in pairs, as well as tutorials and workshops in the first year. In subsequent years, workshops and problems classes help to consolidate your learning. Assessment is usually by written examinations, assignments and, for computational and lab work, written reports and presentations.

In your final year you could embark on a research project as part of a research group specialising in: condensed matter, materials and devices; astrophysics and particle physics; materials at the interface of light and matter, including biological, soft and complex matter, nanophotonics and nanophysics; theoretical physics; and quantum foundations and technologies.

We invite guest lecturers to share their research expertise with students and staff in talks and seminars and have recently welcomed eminent scholars from around the world, including the USA, Switzerland, China, Denmark, Australia, Canada, Japan, Singapore, the Netherlands, France, Spain, Germany and the UK. You can also share your enthusiasm for science and develop your communication skills through our programme of Discover Science days and school visits.

Our established degrees are accredited by the Institute of Physics, who also awarded us Juno status in recognition of our good practice towards increasing the representation of women in physics. The physics students’ society, CHAOS runs a mentoring scheme for new students, and a second- or third-year ‘parent’ will help you settle in and provide support.

‘Not only did I have the opportunity to study many areas of physics, I learned how research into physics is done first hand.’

Rosie (MSci Physics 2016) PhD student researching quantum field theory analogues in non-linear optics.

bristol.ac.uk/ug-study
Bristol physics graduates have excellent employment prospects. The problem-solving, teamwork, experimental design and communication skills our students acquire are rated highly by graduate employers.

Our graduates are highly sought after and find employment in physics and other areas including actuarial work, operational research, government statistical and security services, engineering, management consultancy, IT, investment banking, financial modelling, accountancy and teaching. Recent Bristol physics graduates have entered a whole spectrum of careers, from film-making and journalism to marketing and the civil service.

Around half of our MSci students go on to a higher degree in physics or related disciplines, which can lead to careers in research and teaching. Higher degrees taken by our graduates in 2015/16 included PhDs in plasma physics, atomic and molecular physics and MRes Integrated Photonics and Electronics.

Find out more about the destinations of Bristol physics graduates at bristol.ac.uk/careers/be-inspired/bristol-graduates/physics.

Careers and graduate destinations

Making your application

Typical offer for BSc Physics*
Visit bristol.ac.uk/ug18-physics for other qualifications.

A-levels A**A (contextual AAB†) including A*A (contextual AA†) in Mathematics and Physics in any order.

IB Diploma 38 overall (contextual 34†) including 18 points at Higher Level (contextual 17†) with 6, 6 in Higher Level in Mathematics and Physics.

English Language Profile C††

GCSEs Grade C in English Language

†For information on contextual offers, visit bristol.ac.uk/ug-apply/#typical-contextual-offers.

††For details of English language profiles, visit bristol.ac.uk/ug-language-requirements.

Selection UCAS or Common Application.

Deferred entry Welcomed.

*The typical offer is indicative only and the University accepts a wide range of qualifications. The information is correct at the time of printing (June 2017); however, we recommend you check the University’s website for the most up-to-date information: bristol.ac.uk/ug-study.

Our students come from a range of backgrounds but all share a keen interest in physics. You will need at least an A in A-level Mathematics and Physics (or equivalent), a lively and enquiring mind, commitment and a willingness to contribute.

Selection is based on your UCAS application; we usually only hold interviews for mature applicants, students taking Access to Higher Education courses, or those wishing to study BSc Physics with a Preliminary Year of Study.

Further information
Find out more about the School of Physics: bristol.ac.uk/physics

Institute of Physics (IOP): www.iop.org

The University of Bristol has one of the best employment records in the UK. We are rated sixth in the UK in the QS Graduate Employability Rankings 2016/17 and are the third most targeted university by top UK employers (High Fliers Research, 2017).
Contact us

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If you have any questions about courses, applications or any aspect of being a UK or international student at Bristol please contact the Enquiries Team.

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University guide to the city of Bristol
bristol.ac.uk/citybristol

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Photography
Liz Eve (Fotohaus), Patrick Metcalfe, Dan Rowley, Nick Smith
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