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If you have any questions about courses, applications or student life at Bristol, please contact the Enquiries Team.

Photography
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University of BRISTOL

Physics

Undergraduate study

Courses

Single Honours

BSc Physics
three years F300

BSc Physics with Astrophysics
three years F3F5

BSc Physics with a Preliminary Year of Study
four years F308

BSc Physics with Scientific Computing*
three years F330

MSci Physics
four years F303

MSci Physics with Astrophysics
four years F3FM

MSci Physics with Industrial Experience
four years F305

MSci Physics with Innovation
four years F306

MSci Physics with International Experience
four years F307

MSci Physics with Scientific Computing*
four years F331

MSci Physics with Scientific Computing with Industrial Experience*
four years F334

MSci Physics with Study in Continental Europe
four years F304

MSci Theoretical Physics
four years F340

Joint Honours

BSc Mathematics and Physics
three years GFD3

BSc Physics and Philosophy
three years FV35

MSci Mathematics and Physics
four years GFC3

MSci Physics and Philosophy
four years FVH5

* This course is subject to approval.

This leaflet contains information for students planning to start university in autumn 2020. We have made every effort to ensure all details are correct at the time of going to press (May 2019). However, since this information is subject to change, you are advised to check the University's website, **bristol.ac.uk/ug-study**, for the latest updates.

Why study physics at Bristol?

Physics at Bristol is delivered in a ground-breaking research environment where you will 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 or final-year projects. Recent industry partners include Bristol Zoo, Rolls-Royce, Airbus, 3M, Culham Centre for Fusion Energy, Renishaw, NATS (formerly National Air Traffic Control Services), Science and Technology Funding Council, and The Fat Duck restaurant. We focus on your future during your course, with physics-specific employability sessions giving you valuable experience in presentation, interviews and networking.

We have an international reputation for producing notable innovators, such as Nobel laureates Professor Cecil Powell and Sir Nevill Francis Mott. Our many current pioneers 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, 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.

- Our world-class facilities include state-of-the-art labs and the high-performance supercomputer, BlueCrystal.
- Chaos, our Physics society, won Best Academic and Careers Society (National Societies Awards 2018).
- Develop your career and your interests with an extensive range of optional units.

What will you study?

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, experiments and communication skills, and you will gain expertise in handling and interpreting numerical information.

As well as theoretical knowledge, Bristol physics graduates have excellent practical skills gained from time spent designing and developing experiments in our large, bright, purpose-built teaching laboratory.

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 problem 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; or quantum information and technologies.

We invite guest lecturers to share their research expertise with students and staff in talks and seminars, and we have recently welcomed eminent scholars from around the world, including the US, 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, international mentoring opportunities and school visits.

Many of 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, won Best Academic and Careers Society at the National Societies Awards 2018. It organises social and physics-based events and runs a mentoring scheme for new students in which a second- or third-year 'parent' will help you settle in and provide support.

The High Performance Computing Centre housed in Physics is one of the UK's most powerful research computers, used for analysing data from the Large Hadron Collider.

The HH Wills Physics Laboratory is situated in the heart of campus, next to Royal Fort Gardens.

'Bristol is very charming and has a lot of places to explore. That's what I love about it: it's really dynamic and it seems like it never stops changing.'

Ruta (BSc Mathematics and Physics)

bristol.ac.uk/ug-study

Careers and graduate destinations

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 a whole spectrum of other careers, from filmmaking and journalism to marketing and the civil service. Recent graduate destinations include actuarial work, operational research, government statistical and security services, engineering, management consultancy, IT, investment banking, financial modelling, accountancy and teaching.

Around half of our MSci students go on to a higher degree in physics or a related discipline, which can lead to a career in research or teaching.

Bristol is the second most targeted university by top UK employers.

High Fliers Research 2019

Graduate employers
BAE Systems
Canada Life
Babcock International
National Physical Laboratory
KPMG

Career destinations
Graduate Software Engineer
Graduate Engineer
Assistant Research Scientist
Strategy Analyst
Research Scientist

Source: Destinations of Leavers from Higher Education survey 2016/17. Find out more at **bristol.ac.uk/careers/be-inspired**.

Making your application

Visit **bristol.ac.uk/ug20-physics** for more information about our courses.

Typical offer for BSc Physics

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

IB Diploma 38 points overall with 18 at Higher Level, including 7, 6 (in any order) at Higher Level in Mathematics and Physics (contextual 34 points overall with 17 at Higher Level, including 6, 6 at Higher Level in Mathematics and Physics).

Our contextual offer is a grade reduction of up to two grades below the standard entry requirements, made to applicants from under-represented groups. Find out more at **bristol.ac.uk/contextual-offers**.

GCSEs No specific subjects required.

Selection process UCAS.

For other accepted qualifications, and for our English language requirements, visit **bristol.ac.uk/ug20-physics.**

Application advice for physics courses
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. We recognise that some applicants may achieve higher grades than predicted, and so we often also consider applicants who are predicted to achieve slightly below the entry requirements. Any offer made would be at the standard level.

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

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

This information is correct at the time of printing (May 2019), but we recommend you check the University website for the latest information: **bristol.ac.uk/ug20-physics.**

Read more about how we support you when you are here:

bristol.ac.uk/students