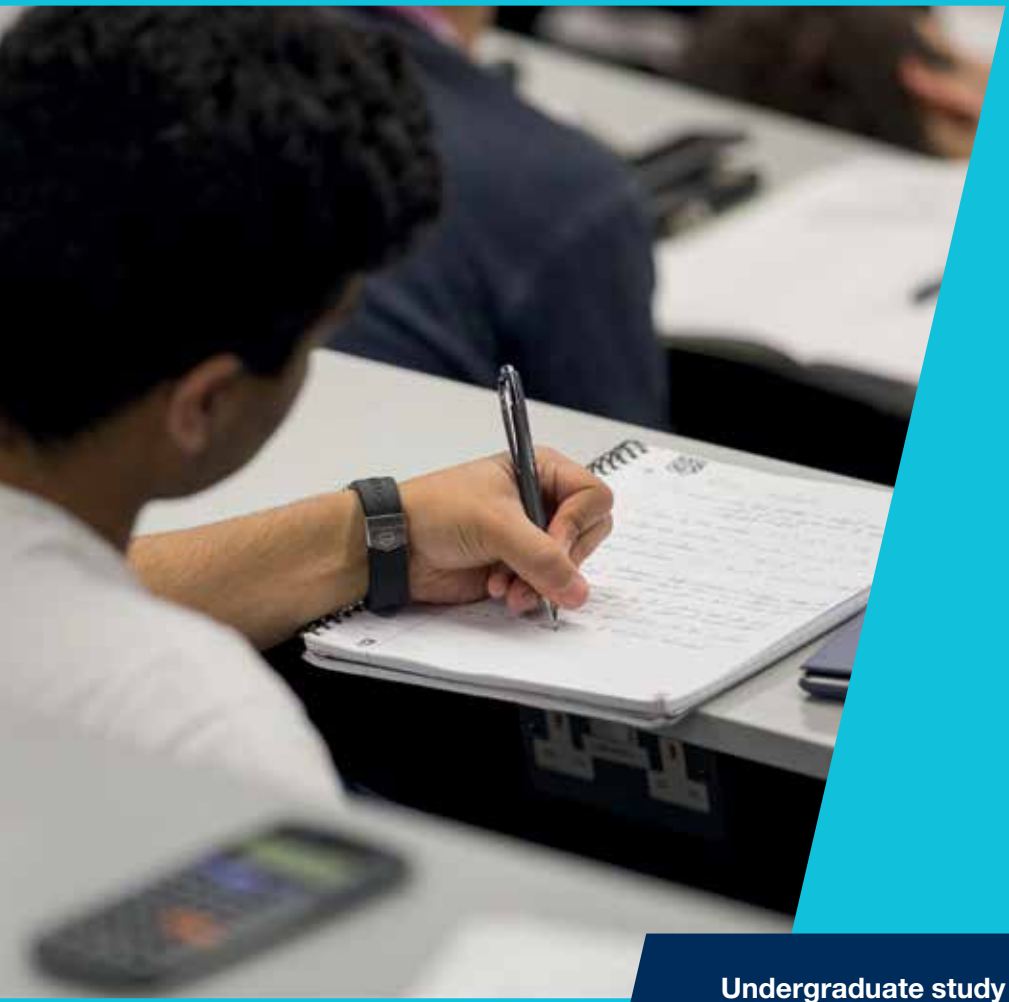
University of BRISTOL

Mathematics



Undergraduate study

Courses

Single Honours

BSc Mathematics
three years G100

BSc Mathematics with Statistics
three years G1G3

BSc Mathematics with Statistics for Finance
three years G1G4

BSc Mathematics with Study in Continental Europe
four years G101

MSci Mathematics
four years G103

MSci Mathematics with Statistics
four years G1GH

MSci Mathematics with Study Abroad
four years G105

MSci Mathematics with Study in Continental Europe
four years G104

Joint Honours

BSc Economics and Mathematics
three years LG11

BSc Mathematics and Computer Science
three years GG14

BSc Mathematics and Philosophy
three years VG51

BSc Mathematics and Physics
three years GFD3

MEng Mathematics and Computer Science
four years GG1K

MSci Mathematics and Philosophy
four years GV15

MSci Mathematics and Physics
four years GFC3

This leaflet contains information for students planning to start university in autumn 2019. We have made every effort to ensure all details are correct at the time of going to press (June 2018). 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 mathematics at Bristol?

Mathematics develops your ability to deal with abstract concepts as well as calculations, and to use each to inform the other. It helps establish and develop skills including deductive and inductive thinking, clear and precise communication, critical thinking, modelling and assessing risk.

Now is an exciting time to be studying at Bristol. The School of Mathematics is in the process of moving to a new home, the iconic Fry Building, in the heart of the University precinct. The building is being completely renovated and remodelled to provide a first-class, modern environment for teaching and research in mathematics, with lecture theatres, tutorial rooms, computer laboratories and plenty of social, study and interaction spaces for students and staff.

We are in the UK top five for mathematics research (*THE* analysis of the Research Excellence Framework 2014). The school is strongly committed to undergraduate teaching. Lecturers are passionate about the subjects they teach, which are often related to their research expertise.

Research strengths in the school include: number theory; dynamical systems; analysis; group theory and representation theory; Bayesian modelling and analysis; behavioural biology; multiscale methods; signal processing and time series; probability theory; mathematical physics; fluids; dynamical systems and statistical mechanics; and materials science.

'The academics are all really helpful and welcoming when you have a question. They are not just lecturers, they want to help you achieve and learn about what they have a passion for. They are truly invested in your future.'

Netty (MSci Mathematics with Study in Continental Europe)

What will you study?

Our first year provides a broad foundation in mathematics. Single honours students follow a prescribed programme of study that includes calculus, linear algebra, analysis, number theory and group theory, probability and statistics.

There is increasing choice in later years and by the third year students can either study a broad range of mathematics or choose to specialise. For example you could concentrate on themes such as mathematical physics, probability theory, ergodic theory, number theory or continuum mechanics.

Students on Mathematics with Statistics courses take core units in probability and statistics. The Mathematics with Statistics for Finance degree focuses further on statistics units relating to financial mathematics. Students on courses with Study in Continental Europe take a modern language in place of a mathematics unit in years one and two. Most joint honours students divide their studies equally between mathematics and their partner school.

In year two of your course you can take an outside unit in a subject unrelated to mathematics, and in year three you can take some units outside the department which are related to mathematics.

In years three and four we offer a range of individual and group undergraduate projects, some of which provide an opportunity to study and even contribute to mathematics at the frontiers of research.

Teaching and assessment
Teaching is mainly conducted through lectures. Lectures take place in large groups in the first year and become smaller in subsequent years. Currently, first-year students typically have ten to 12 hours of lectures per week, with around nine hours a week in later years.

Lectures are supported in several ways. Our philosophy is to provide the most support in the first year; support is then tapered in subsequent years, encouraging students to become more independent. In the first year, students attend tutorials where tutors discuss homework and answer questions to help smooth the transition to university. A mathematical investigations unit in the first year provides students with the opportunity to perform project work under the supervision of their personal tutor.

Second-year units have a weekly problems class, which is devoted to worked examples. The school has also introduced a popular Maths Café, where students can get help on specific second-year units from peers who have studied those units in previous years. Lecturers are always happy to discuss questions informally, for example after lectures or during drop-in sessions for each unit. In the third year of most three-year degrees you can complete an independent mathematics project; this is mandatory for fourth-year students.

Solving problems is essential to learning mathematics. Problem sheets are assigned in all units. Work is marked, and solutions and feedback are provided. Most units are assessed by examination.

Personal tutors
You will be assigned a personal tutor who will normally remain with you throughout the duration of your degree course. They will get to know you, follow your progress and provide academic advice and they are a first point of contact should any problems arise.

'I love how flexible the course is. This has allowed me to specialise in the areas of maths that really interest me. I also chose to study a unit from the Economics department in my second year, which I really enjoyed.'
Zainab (MSci Mathematics)

bristol.ac.uk/ug-study

Careers and graduate destinations

A mathematics degree from Bristol is highly valued by employers and is an excellent starting point for a wide range of careers. Bristol ranks fifth nationally in terms of three-year graduate salaries for mathematics (Longitudinal Education Outcomes data 2017).

The skills you acquire will make you an attractive prospect to employers in many fields. Highly prized skills developed through a mathematics degree at Bristol include: comprehending and drawing inferences from an abstract conceptual framework; formulating tractable problems from complex questions; presenting cogent arguments and analysing their merits; and predicting outcomes and evaluating risks.

The financial sector and teaching remain two popular areas of employment, but Bristol mathematics graduates also take up opportunities in broader areas such as engineering, digital media and software, marketing, and many other sectors. Many graduates choose to further their studies with a postgraduate degree.

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 2018 and are the fourth most targeted university by top UK graduate employers (High Fliers Research 2018).

Making your application

Typical offer for BSc/MSci Mathematics*

Visit **bristol.ac.uk/ug19-maths** for Joint Honours and other qualifications.

A-levels A*A*A (contextual AAA†) including A*A* (contextual AA†) in Mathematics and another mathematics-related subject; or A*AA (contextual AAB†) including A* (contextual A†) in Mathematics and A in Further Mathematics.

IB Diploma 40 points overall (contextual 36†) with 18 at Higher Level, including 6, 6 at Higher Level in Mathematics and another mathematics-related subject.

English Language profile E††

GCSEs Standard literacy requirement (C in GCSE English or equivalent).

†For information on contextual offers, visit **bristol.ac.uk/contextual-offers**.

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

Selection UCAS or Common Application.

*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 2018); however, we recommend you check the University's website for the most up-to-date information: **bristol.ac.uk/ug-study**.

We are looking for students who have a strong aptitude and genuine passion for mathematics. We encourage applicants to take part in UK Mathematics Challenges and to try Sixth Term Examination Papers, known as STEP papers, if possible. STEP papers are based on the A-level syllabus but are more challenging than A-level exams; the questions are closer in style to university-level mathematics. Don't be discouraged if you find them hard at first. We may make you an alternative lower A-level offer based on STEP results.

We do not usually interview applicants, but students who receive an offer from us will be invited to visit the School of Mathematics on one of our visit days, where we organise a range of activities to introduce you to mathematics at Bristol.

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

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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