



Computer Science



Undergraduate study

Courses

Single Honours

BSc Computer Science

three years G400

MEng Computer Science

four years G403

MEng Computer Science with Study in Continental Europe

four years G401

MEng Computer Science with Study Abroad*

four years

MEng Computer Science with Innovation

four years G404

*Entry by transfer from G401 or G403 at the end of year one.

Joint Honours

BEng Computer Science and Electronics

three years GH45

BSc Mathematics and Computer Science

three years GG14

MEng Computer Science and Electronics

four years GH46

MEng Computer Science and Electronics with Study Abroad

four years GH4P

MEng Mathematics and Computer Science

four years GG1K

Why study computer science at Bristol?

Computer science is a dynamic and continually expanding subject. It underpins the digital technologies that impact our society and the way we live our lives. Bristol is a leading university for the study of computer science, and our courses are designed to give you skills and knowledge that combine the fundamentals of the subject with an exploration of its diverse applications.

You might be attracted to computer science for its creativity and be interested in designing and making things, from programmes to products. Maybe you enjoy the intellectual challenge of solving problems and finding ways to understand complex phenomena, both natural and artificial. You may also be inspired by the direct relevance of computing to the real world, as well as its importance in many areas of society.

We provide a balance between theory and practice, enabling the in-depth study of techniques at the same time as using them in real applications. Alongside expert researchers, you will study cutting-edge topics such as high-performance computing, robotics, cryptography and artificial intelligence. You will also develop technical skills in software development, system design and animation and transferable skills such as teamwork, communication and enterprise. This balance provides an ideal platform for our graduates' future careers and is highly regarded by employers.

The Engineering Growth Project has recently invested £14 million to equip the Faculty of Engineering well into the 21st century. This major expansion of our facilities includes state-of-the-art equipment and large, flexible teaching, design, study and workshop spaces, which enable interactive teaching and learning. Our new atrium acts as a social learning and meeting place, with a new café and bookable project and study rooms.

'The University prepares you for real-life problems that await you after you graduate. The courses have an equal amount of practice and theory. Lecturers are always keen to help you in the course of your studies; they are always ready to advise you in your choice of future career and share their experience with you.'

Ahinora (MEng Computer Science)

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.

What will you study?

Our computer science courses provide a broad study of computing, covering all the key aspects of software and hardware and a wide range of application areas. The courses are designed to give you a thorough understanding of computers and computer systems and how to use them.

In year one you will study the theoretical principles of what computers can do and how to design algorithms to run on them. Software engineering units cover the fundamentals of programming. You will then implement these techniques in supervised practical classes and individual assignments, solving problems using a variety of programming languages. This will quickly build up your analytic and programming abilities, enabling you to adapt easily to new programming languages and paradigms – a skill that is highly valued by leading hi-tech companies.

Throughout the rest of the course you will gain experience working on real problems, with opportunities to specialise in areas of computing that are of particular interest to you. Whatever career you choose, the skills of design, planning, problem solving, meeting deadlines and teamwork that you will develop throughout your degree will be highly beneficial in your work.

We offer three- and four-year courses. The focus of the third and fourth year of our four-year MEng degrees is different to the final year of a three-year BSc, so you should read the course descriptions carefully. If you are undecided, the first two years of the courses are the same, making it easy to transfer between them.

Our Joint Honours Mathematics and Computer Science courses combine the fundamentals of computing and mathematics with specialisation in an area of computer applications. They are likely to be of interest to those wanting to study computing while continuing their studies in mathematics. We also offer Joint Honours courses with the department of Electrical and Electronic Engineering.

The MEng Computer Science with Innovation combines in-depth subject specialism with interdisciplinary breadth, creative teamwork and entrepreneurial skills. You will gain a solid discipline strength in computer science and, using this subject knowledge in an innovative way, translate your ideas into plans for digital and creative enterprises.

Those on the Study in Continental Europe and Study Abroad courses will spend their third year at a partner university overseas.

Our aim is to provide you with a dynamic and flexible learning environment based on interesting, challenging material that will be relevant to your future career. We have a very open learning culture in which students and staff work closely together at all levels. In your first year you are assigned a personal tutor who will advise and help you throughout your course. We also run a mentoring system in which second-year students support incoming first years.

All our courses strike a balance between theory and practice. They will provide opportunities for you to understand the demands of industry, with emphasis placed on teamwork, project management and the importance of business planning and enterprise. We use a wide variety of teaching and assessment methods, including lectures, tutorials, laboratory classes, online resources, exams and practical assignments. You will cover fundamental principles in lectures and tutorials, while practical classes and coursework allow you to gain experience of how to use these principles in practice.

You will also benefit from a dedicated Industrial Liaison Office, which develops industrial links, internship and mentoring schemes, and industry-specific lectures.



'The University of Bristol is a great place to study, whether in terms of academic or social life. The lecturers are approachable and plenty of support is offered when needed.'

Alvina (BSc Computer Science)



Careers and graduate destinations

A degree in computer science from Bristol will open up a wide range of career opportunities. Our students acquire a distinctive set of skills, combining in-depth knowledge of computer systems, programming and applications with a solid grounding in logical reasoning, design, problem solving and communication. For this reason, Bristol graduates are highly sought after and find rewarding and exciting careers.

The concentration of high-technology and creative industries in the Bristol region provides us with insight from industry insiders and opportunities for student projects, scholarships, prizes and vacation work, and many students find their first job in the area after graduating. Our links with industry form an integral part of the learning environment of the department. Graduates have found employment in companies including Amazon, Google, Microsoft, IBM, Hewlett Packard, Facebook, Nvidia, GCHQ, Bloomberg and Electronic Arts.

Industrial Liaison Office

The Industrial Liaison Office (ILO) manages the Faculty of Engineering's links with a diverse set of world-class engineering and technology companies and works to ensure that our students engage with industry from the very start of their studies.

As an engineering student at Bristol, you will benefit from an outstanding range of activities designed to enhance your employability. These include our Inside Track lecture series, where business insiders offer first-hand insight into the engineering industry. Our industrial mentoring and internship schemes provide opportunities to gain valuable experience and make important connections, and our regular newsletter highlights further opportunities and industry events. See our website for more information: bristol.ac.uk/engineering/ilo.

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 Computer Science*

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

A-levels A*AA (contextual AAB[†]) including A* (contextual A[†]) in Mathematics.

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

English Language profile E^{††}

GCSEs No specific subjects required.

[†]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.

It is important that you demonstrate a genuine interest in your chosen computer science course, so please visit our website and read through the detailed information on the courses and units that we offer. When selecting applicants, we look for ability and potential rather than specific knowledge about computers.

Advanced Extension Award (AEA) and Further Mathematics are not required but would be helpful for your studies, particularly for Joint Honours Mathematics and Computer Science courses. We do not require A-level Computing or ICT. For MEng Computer Science with Study in Continental Europe, you will need a language qualification at GCSE standard or above.

We welcome applications linked to the Year in Industry scheme run by the Royal Academy of Engineering: www.etrust.org.uk.

Further information

Find out more about the Department of Computer Science: bristol.ac.uk/computer-science.

For details of the MEng courses in computer science and electronics please visit our mini-website: bristol.ac.uk/engineering/interdisciplinary/cse.



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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