

**Undergraduate study**

# Computer Science



## Key highlights



### Become an expert

Master advanced techniques from deep learning and AI to computational finance and cryptology. Demonstrate your skills in projects involving real-world clients.



### Tech hotspot

Bristol is a UK 'top digitech city' (TechNation 2018) and the University is part of SETSquared, the 'world's best university business incubator' (UBI Global, 2017-19).



### Outstanding support

Benefit from a £2.7 million investment into collaborative computer labs and access a dedicated Industrial Mentor.



### Industry recognition

Many of our courses are accredited by BCS, the Chartered Institute for IT.

## Why study computer science at Bristol?

Join a department renowned for its innovative research and cutting-edge teaching, where you'll develop a comprehensive mastery of computer science – a discipline that is fundamentally reshaping the modern world.

Our courses first teach the core concepts underpinning computer science before allowing you to choose between a wide range of advanced computer science topics. We will develop your analytical skills and teamworking strengths, and give you the experience of devising practical solutions for real-world challenges during a range of individual and group projects that you will co-create with leading academics.

We provide a careful balance between theory and practice, enabling in-depth study of computer science methods at the same time as helping you to learn to use them to develop real applications – often in collaboration with real companies or other external users.

You will be able to study topics such as high-performance computing, machine learning, cryptography and artificial intelligence. You will also develop skills in software development and system design, and gain important transferable skills in teamwork, communication and enterprise.

In this way, our computer science courses are designed to propel our graduates into the most exciting computer science careers and opportunities.

## Find out more

Entry requirements, course structure and units  
[bristol.ac.uk/ug2021-compsci](http://bristol.ac.uk/ug2021-compsci)

In year one, you will study the fundamental core skills and knowledge underpinning computer science: all three major programming paradigms, algorithmics, the mathematics key to computer science, computer architecture, and software tools.

You will gain the experience of implementing 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.

In year two, you will take classes introducing key areas within computer science, including theoretical and data-driven computer science and the relationship between computer science and society. You will also gain experience working on a practical project in collaboration with a real-world 'client' such as Hewlett Packard or the Environment Agency, before being given the opportunity to specialise in areas of computing that are of interest to you for the rest of your degree.

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

Our joint honours courses combine computer science with two strongly complementary disciplines, mathematics and electrical and electronic engineering, while the MEng Computer Science with Innovation degree is aimed at students with an interest in combining computer science with interdisciplinary, creative teamwork and entrepreneurial skills.

'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)



A concentration of high-technology and creative industries – including animation and games developers – in and around Bristol offers exciting opportunities for our students.



The Industrial Liaison Office manages our links with world-class engineering and tech companies, working to ensure you engage with industry throughout your study. You can attend Inside Track lectures, where business insiders offer first-hand insight, or take advantage of industrial mentoring and internship schemes.

Every year, third-year MEng Computer Science students work together in teams to create state-of-the-art computer games, which are showcased at our annual Games Day.



# Courses

BSc Computer Science  
MEng Computer Science  
MEng Computer Science with Study Abroad  
MEng Computer Science with Innovation  
BEng Computer Science and Electronics  
MEng Computer Science and Electronics  
MEng Computer Science and Electronics with Study Abroad  
BSc Mathematics and Computer Science  
MEng Mathematics and Computer Science

## Connect with the Faculty of Engineering

 **Engineering, University of Bristol**

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### Photography

Dan Rowley, Kristen Grayewski

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This leaflet contains information for students planning to start university in autumn 2021. We have made every effort to ensure all details are correct at the time of going to press (May 2020). However, since this information is subject to change, you are advised to check the University's website, [bristol.ac.uk/ug-study](http://bristol.ac.uk/ug-study) for the latest updates. Any sample units listed are indicative and offerings may change due to developments in the relevant academic field. Unit availability varies depending on staffing, student choice and timetabling constraints.

