From your smartphone to your smart speakers, your Fitbit to your Xbox, computer science is behind all the technology that fills our daily lives – studying it will equip you for the jobs of the future.

Big Data Specialist

You'll analyse and work with large, complex data sets to support decision making, identify new trends and improve performance. By 2022, 85% of companies are expected to have adopted "big data analytic", giving them an insight into relevant industry trends. Data analysts are already in high demand. This will increase by 33% by 2024, with data analysis a major skill in the economy of 2030.

Interaction Designer

You'll be the bridge between new technology and its human users, designing new systems that are easy to use and engaging. As automation and Artificial Intelligence improve, over one-third of businesses are predicted to adopt robots of some kind by 2022. IT system analysts and designers are in high demand in the UK, with jobs in this area expected to grow by 5.9% by 2027.

How will the most popular industries for Computing graduates change?

Science - 1,900 new chemical scientist jobs are expected to be created by 2027.
Marketing, PR and sales - 14,800 more people will be employed as marketing professionals in 2027.

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COMPUTING

5 work skills that Computing will give you:

Mathematical Skills

Mathematical principles are essential to computer programming. You'll practice binary and hexadecimal conversions and calculations to simulate how a computer processes instructions.

Data Analysis

We create a vast amount of digital data. Capturing and storing this data is an essential part of computer science. You'll explore the abstract concepts of attributes, records and files, as well as learn about specific data types and structures, which are used to represent information, and how to apply these skills in a variety of different workplace scenarios.

Problem Solving

Computers need specific and detailed instructions to follow to successfully complete a task. That's essentially what a computer program is. You'll learn how to write programs, taking those instructions and putting them into a language a computer can understand. Not everything will work, so you also need to develop your resilience in order to overcome challenges.

Creativity

Creativity and problem solving go hand in hand. Sometimes you'll need to think creatively when you're writing a computer program because it may not be obvious how to solve a particular problem. You might also have creative ideas for the development of an app or computer game.

Logical Thinking

You will learn about different sampling techniques to gather data and when you should use them. You'll also understand the various ways statistics can be presented, including in scatter diagrams and other visual forms.

Where can Computing take you?

Computing Jobs Developing ICT:

- E-learning Developer
- Forensic Computer Analyst
- Hardware Designer
- ICT Consultant
- Systems Analyst
- Software Developer

Computing Jobs Using IT:

- Architectural Technician
- CAD Technician
- Contact/Call Centre Worker
- Customer Services Adviser
- Desktop Publisher
- Database Administrator
- Data Entry Clerk
- Digital Marketing Officer
- Library Assistant
- Pre-Press Operator
- Social Media Manager
- Web Editor

Other Computing Related Jobs:

- ICT Trainer
- ICT Teacher

Multimedia (music, graphics and video) Jobs:

- Animator
- Computer Games Designer
- Web Designer
- Web Developer

Future of Job Facts:

Accountancy

Around **90%** of law graduates find work and/or further study within six months of their graduation. There is also a demand for law graduates with good knowledge of online law.

Banking & Finance

The Public Sector - which includes things like NHS hospitals, state schools, local councils and the police - employs more than **5 million** people across the U K. That's over 17% of the workforce.

IT & The Internet

Social workers, care workers and other social care professionals help vulnerable children and adults in a vast industry which employs over **1.8 million** people across the UK.

Engineering

Almost **200,000** people work in Advertising & Marketing in the UK. Jobs increased by a third between 2011 and 2016.

Entrepreneurship

Many charity and not-for-profit organisations offer opportunities to work overseas helping others. Charities employ **827,000**, over 2.5% of the UK's workforce.

Consultancy

Primary school and nursery teachers have one of the highest rates of job satisfaction in the country. There are more than **450,000** teachers across the UK.