

A Level Computer Science

What the course covers

Nationally, A Level Computer Science is one of the fastest growing A Levels. We all take the internet and computer games for granted, but at some point someone who studied computer science had a hand in creating them. All around us is evidence of expertise in computing, not just in terms of how computers and programming work but the higher-level analytical skills required.

Year 1 Topics

- Fundamentals of programming
- Fundamentals of data structures
- Fundamentals of data representation
- Systematic approach to problem solving
- Theory of computation
- Fundamentals of computer systems
- Fundamentals of computer organisation and architecture
- Consequences of uses of computing
- Fundamentals of communications and networking

Year 2 Topics

- Big Data
- Fundamentals of functional programming
- Systematic approach to problem solving
- Non-exam assessment - the computing practical project

The complete specification can be viewed on the AQA website. www.aqa.org.uk

What students can do with this course

This course will suit students who are logical and who have an analytical approach to problem solving. It is excellent preparation for students looking to take a computer science or computing related degree. If you would like a career as a programmer / computer engineer, or you would like to work in the telecommunications industry, then this course is appropriate. Students from this course have also gone on to study medicine, law, business, politics and other science subjects, drawing from the skills learned. Importantly, because of the focus on logic, systematic analysis and problem-solving, students with qualifications in computing are highly regarded by employers and universities alike.

How this course is assessed

Year 12: 50% on-screen exam (1hr 30mins), and 50% written exam (1hr 30mins)

Year 13: 40% on-screen exam (2hr 30mins), 40% written exam (2hr 30mins) and 20% non-exam assessment solving / investigating a practical problem

Entry requirements

All our course entry requirements are detailed in the Entry Requirements document located in the admissions section of our website.