

COMPUTER SCIENCE

“Everybody in this country should learn to program a computer, because it teaches you how to think”
- Steve Jobs

COURSE DETAILS

A Level
AQA - 7517

Computer Science GCSE Grade 6 or higher
(if studied) or Maths GCSE Grade 6 or
higher if Computer Science not studied

Students will study a variety of topics related to computer systems including object oriented programming, data representation, systems architecture and networking. A combination of theory and programming skills will allow students to progress onto a range of qualifications.

Programming skills and theory are taught side by side throughout the course by computer science specialists with experience in schools and in industry. Topics include cryptography, wireless networking, systems architecture and the application of computer science in the real world.

In Year 12 the programming will focus on procedural programming techniques in Java, while Year 13 will broaden students' horizons with a wider range of programming concepts including object-oriented, functional and declarative programming languages such as PHP, SQL and Haskell.

Each year students will sit a paper based exam covering their knowledge of theory topics and a practical, online exam that will assess students' programming skills. Year 13 also includes a coursework element, led entirely by the students' interests, which accounts for 20% of the overall grade.

Computer Science is an ideal A Level for those wishing to pursue a career in the computing industry, but is also useful for mathematicians, scientists and engineers.

