



# Computer Science



## SO WHAT IS COMPUTING AND COMPUTER SCIENCE?

- Computer Science covers a huge amount, from the design of computers, through to programming them and onto applications in areas as diverse as Science, Engineering and the Arts.
- It is both an abstract and theoretical discipline and yet intensely practical. The theory of solving problems and the implementation of solutions.
- It is not ICT. ICT is like learning to drive a car; Computing is designing the car, servicing the car, upgrading the car, racing the car to the limits.

## ASSESSMENT

**Level:** A Level **Specification:** OCR Computer Science H446 <http://www.ocr.org.uk/qualifications/as-a-level-gce-computer-science-h046-h446-from-2015/>

### Assessment Details:

*Unit 1* - Computer Systems. *Unit 2* - Algorithms and Programming. Both units are written exams with a combination of short and long answer questions. Both exams are 2hr30 worth 40% taken at the end of Year 13.

In Year 13 Units 1 and 2 are progressed onto a higher level. Students also undertake a full project worth 20%. It's a substantial piece of work, where they are expected to plan, develop and test a computer system ideally to meet the needs of a real person.

## QUALITIES AND QUALIFICATIONS

- A strong interest in programming and computing hardware and software
- Be able to investigate and solve problems
- The abilities to research and investigate new technologies
- Capable of working both independently and in teams

## TRIPS AND VISITS

Students will visit Bletchley Park to see how computers and other technology were used to help win the war. While at Bletchley Park, students will take part in a number of interactive code breaking activities. Students will also visit the History of Computing Museum, to look into how technology has changed and what the future may hold.

## FUTURE PATHWAYS

This subject provides the ideal foundation for those students who wish to pursue Computer Science/ Computing at degree level or in any other subject area and enhances employability for those who wish to follow a career within the Computing/ICT sector.

