



# Computer Science A Level

**Course Leader:** Mr S Hunt

## Why Study A Level Computer Science?

Computing skills are in very high demand in our modern economy. You should choose A Level Computer Science if you wish to go on to higher education courses or employment where knowledge of computing, programming and computer science would be beneficial.

This course puts computational thinking at its core, helping you to develop the skills to solve problems, design systems and understand human and machine intelligence – it is scientific at its core with an exciting and interactive element, with around 60% of the course given to actual programming.

Even though it is not necessary for you to have studied Computer Science at GCSE level, it is important that you have a very keen and lively interest in computing and coding. Students will need a logical mind with a persistent and methodical approach to solving problems and writing computer programs. All students will be expected to work on their programming skills outside of the classroom. Traditionally, students with good maths skills do well on this course but a genuine interest in coding/programming is more important.

## Course Content and Assessment

The course consists of three mandatory units:

- Unit 1 – Computer Systems – theoretical written paper (40%)
- Unit 2 – Algorithms and programming (40%) – although this is a written paper, it is interactive in its teaching, as we believe that by learning much of it by actual programming you will gain the highest possible marks.
- Unit 3 – Programming project (20%). In this project, you will choose a computing problem to create a solution to.



More detail pertaining to content can be found at: <http://www.ocr.org.uk/Images/170844-specification-accredited-A-Level-gce-computer-science-h446.pdf>

## Progression Routes

If you wish to study a Computer-related or Electrical Engineering or Business IT Systems type degree, this course will give you a great advantage. A Level Computing is a respected qualification among employers, as many jobs require an understanding of computing systems, which is an ever-expanding area of the employment market. Global companies such as Microsoft and Google are actively sponsoring and recruiting Computing graduates and, outside of London, Leeds is at the heart of the IT industry, with many well established games, web-design and software companies based here. Starting salaries for new recruits can be as much as £36,000 per year.

## Entry Requirements

All students must have passed GCSE Mathematics at grade 5 or above. Students who have studied iMedia should have achieved at least a Merit, or if they have studied Computer Science should have achieved a grade 5 or above.