



### Who is this course for?

This OCR A level is aimed at students who desire to learn about key technical and theoretical topics in computer Science and are looking forward to continue at university, apprenticeship or a future career in the computer industry.

### What could it lead to?

This course will allow you to enrol on any degree course on computer science and leads to rewarding careers in software development, programming, networking and game development

### What is the course about?

This course is centred in exposing all students to computational thinking and in-depth understanding of computer science. You will be studying these units over the 2 years: Programming techniques, data structures, algorithms, software development, data representation, operating systems, Types of processors, function of processors, CPU, computing, Fundamentals of communication and networking, Fundamentals of databases, computational thinking, web technologies, Boolean Algebra and Karnaugh Maps. It is a very intense course. It will require a lot of self-study to succeed. The course prepares you very well to have a head start at university. The course covers the latest changes in the computing world.

### How will I be assessed?

The A level has 2 written papers and non-exam assessment (NEA). Paper 1 and Paper 2, both, equate to 40% each of the final mark. The NEA is worth 20% and is begun in the final half term of Yr 12 and completed in Yr 13. Paper 1 consists of computer systems, computer architecture, programming concepts, relational databases, CPU, web technologies and data representation. NEA projects can range from developing a program to control and manipulate drones or a robot to an interactive website or an educational 2D/3D game. Paper 2 focuses on problem solving, computational thinking, algorithm design and implementation and programming understanding and how it is applied.

### Useful websites/further reading

OCR website for A Level Computer science  
**OCR AS and A Level Computer Science book** by PM Heathcote and RSU Heathcote  
[www.teach-ict.com](http://www.teach-ict.com)  
<https://student.craigndave.org/a-level-videos>

