

# Computer Science

## A Level



### Entry Requirements

Grade 5 in GCSE Computer Science **and**

Grade 5 in English Language **or** GCSE English Literature **and**

Grade 5 in GCSE Mathematics

(If GCSE Computer Science is not studied a Grade 6 in English and Maths is required)

### Course Overview

*“Those who can imagine anything, can create the impossible.”*

— Alan Turing

The A Level course is relevant to the modern and changing world that we live in today – The Information age also known as The Computing Age or the Digital Age.

Computer Science uses computational thinking to develop the necessary skills to solve problems, design systems and understand the power and limits of human and machine intelligence.

Over the 2 years, students cover 3 components: Paper1, Paper 2 and a Programming project. The A Level is a practical and creative subject where students will develop skills to apply the principles learned in the classroom to real world systems. Students can choose the topic for their project based on their particular interests. Here they will develop the ability to analyse, critically evaluate and make decisions, skills all of which will help prepare for the next step.

### Exam Information

Duration: 2 years

Exam Board: OCR

Contact Mrs A Kansara

Component 1 - Computer Systems (40% of total A Level)

Component 2 - Algorithms and Programming (40% of total A Level)

Component 3/4 - Programming Project (20% of total A Level)

### Qualification Gained

A Level Computer Science

### Career Opportunities

Computer Science is a great qualification to have for a variety of STEM related careers including Medicine and Astronomy. Other possibilities include: Software Engineer, Games Design and Development, Network Architect, Network Engineer, Web Developer, Web Designer, Data Scientist, Data Analyst, Systems Analyst, Software Developer, Cyber Security, Computer Programmer and the list is endless.

### Subject Links

Computer Science can be linked with any subject as we live in a world that is very computer based. Links in particularly well with Mathematics, Physics, Business and Design.