Computer Science

Qualification type: A Level   **Exam Board:** OCR

What will I learn about?
- In Computer Science you will learn about: The characteristics of contemporary processors, input, output and storage devices; Software and software development; Exchanging data; Data types, data structures and algorithms; Legal, moral, cultural and ethical issues; Elements of computational thinking; Problem solving and programming; Algorithms to solve problems and standard algorithms
- The learner will choose a computing problem to work through. The project will include Analysis of the problem; Design of the solution; Developing the solution; Evaluation

How is my work assessed?
80% Examination and 20%Programming Project
There are two written examinations, each lasting 2 hour and 30 minutes.
- **Paper 1:** Computer Systems. 140marks, 40% of the overall grade.
- **Paper 2:** Algorithms and programming. 140marks, 40% of the overall grade.
- **Programming project:** 70marks, 20% of the overall project

What should I consider before starting this subject?
Before starting A-level Computer Science, some key things to consider are your mathematical skills; programming experience; have a problem-solving mindset; and have an interest in technology.

Why is this course useful and what might it lead to?
A-Level Computer Science is a valuable course that provides a deep understanding of how computer systems work, as well as how to program, design algorithms, and solve problems. It covers core topics like computational thinking, programming, data structures, networks, and cybersecurity. The skills learned are highly relevant in today's digital world and can lead to further study in fields such as Computer Science, Software Engineering, Data Science, and Artificial Intelligence. This course also opens doors to careers in technology, finance, research, and industries where computing plays a key role.

Entry requirements
Grade 5 in Maths and Computer Science

Where can I find out more information?
Speak to your Computer Science teacher.
You can find further information on this qualification at https://ocr.org.uk/qualifications/as-and-a-level/computer-science-h046-h446-from-2015/