LOUGHBOROUGH
Amherst School

A Level Computer Science

Why study Computer Science?

The most important aspect of Computer Science is problem solving, an essential skill for life. Students study the design, development and analysis of software and hardware used to solve problems in a variety of contexts. Because computers solve problems to serve people, there is a significant human side to Computer Science as well.

Computer Science also links very closely with Mathematics. For those who have a love for Mathematics they will also find the problem solving, programming and logic involved in Computer is ideally suited to their skillset.

Entry requirements

Grade 6 in GCSE Maths is needed for the Computer Science A Level. There is no prerequisite of needing to study GCSE Computer Science.

What does the course involve?

- Programming (Python)
- Data representation including the binary number system, graphics and sound
- Computer architecture including how the Computer Processor works
- Ethics and laws related to Computing
- Fundamentals of Networking

Exam Board

AQA

How is the course assessed?

Two exams sat at the end of Year 13 (40% weighted each) and a programming project (20%).

What can an A Level in Computer Science lead to?

Computer Science is a rapidly expanding subject. Think about the amount of new technology which has been developed in the last 10 years. Each new technology has created jobs in areas like software engineering, game development and analysis. The jobs of tomorrow are all very closely linked with the field of Computer Science.

What skills will be developed in the Computer Science A Level course?

- Problem solving
- Programming
- Teamwork

Computer Science is taught at Loughborough Grammar School.