

A Level Computer Science

Why study Computer Science at A Level?

In a world dominated by computer technology, this course is an essential tool to take your understanding to the next level. Computer Science is, above all else, relevant to our ever-changing world.

It is a practical subject where students can apply the academic principles learnt in the classroom to real-world systems. It's also an intensely creative subject that combines invention and excitement, and can start to explore the natural world through a digital prism.

Learners will develop a whole array of skills from the ability to analyse, critically evaluate and make decisions to seeing the relationships between different aspects of computer science.

What will I study?

The fundamental principles and concepts of computer science including; abstraction; decomposition; Logic; algorithms and data representation.

You will also analyse problems in computational terms through practical experience of solving such problems, including writing programs to do so.

Assessment

80% examined, 20% project.

Paper 1: Computer systems.

Paper 2: Algorithms and programming.

The programming project gives you the opportunity to develop a substantial piece of software, for example in: simulations; complex games; automated scheduling; online multi-user vehicles and more.

Study trips, visits and events

You will have the opportunity to spend an afternoon seeing coding and computing in action at *Computing in Industry*.

You will also have the opportunity to enter the *British Informatics Olympiad* - a national computing competition, where they can compete to win the *Hackathon!*

Subject entry requirements

Grade 5 in Computing if taken, or 5 in Maths and English Literature or Language if not taken.