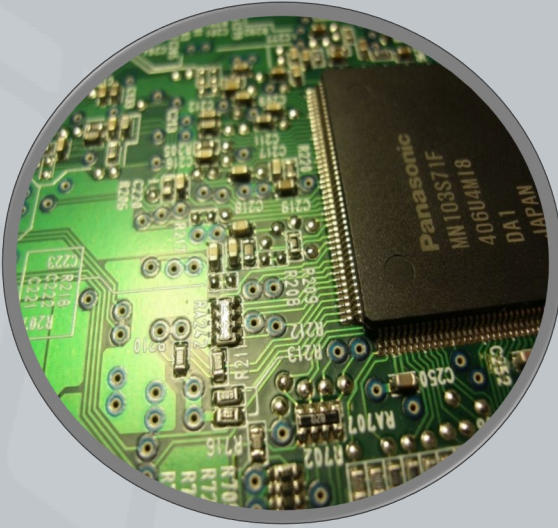


Why study Computing at A Level?

Computer science is, above all else, relevant to the modern and changing world of computing. It is a practical subject where students can apply the academic principles to real-world systems. It's also an intensely creative subject that combines invention and excitement and can look at the natural world through a digital prism. Learners will develop an ability to analyse, critically evaluate and make decisions.



Student Perspective

I chose computer science as it covered a range of areas that I wanted to learn more about. We are studying everything from encryption to software development to artificial intelligence.

Computing is a good match for the other subjects I have taken and I like that there are many opportunities for university courses or employment after this course.

Sam, A Level computing student

Study trips, visits and events

Computing in Industry – Students can gain industry insights through STEM ambassador talks and have the chance to participate in the government-backed Cyber Security Competition with Cardiff, UWE, and South Wales Universities. They can also volunteer by supporting younger Computer Science students in clubs and lessons. Additionally, students can enjoy computing-focused trips and career events, enhancing their practical knowledge. These opportunities can help build valuable skills and foster connections for future careers in the tech industry.

Subject entry requirements

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

What will I study?

The aims of this qualification are to enable learners to develop:

- An understanding and ability to apply the fundamental principles and concepts of computer science, including abstraction, decomposition, logic, algorithms and data representation;
- The ability to analyse problems in computational terms through practical experience of solving such problems, including writing programs to do so;
- The capacity to think creatively, innovatively, analytically, logically and critically;
- The capacity to see relationships between different aspects of computer science;
- Mathematical skills.

Assessment

80% examined, 20% coursework.

Computer systems: Written paper - 2 hours and 30 minutes (40% of total A Level).

Algorithms and programming: Written paper - 2 hours and 30 minutes (40% of total A Level).

Programming project: - non-exam assessment (20% of total A Level).