# Computer Science



Reviewed: October 2024

**Course:** A Level Computer Science

# **Entry Requirements**

5 GCSEs at grade 9-4 across a range of subjects including GCSE Computer Science at Grade 6 or strong foundation in programming and a Grade 6 in GCSE Maths.

### Aims of the Course

A Level Computer Science qualification splits learning into three sections: Computer Fundamentals, Programming Techniques and Logical Methods, and a Programming Project. As natural progression from GCSE (9–1) Computer Science it provides the perfect springboard for students looking at specialising in a computing-based career. Within the course, students study a range of theory topics. These include the principles and understanding linked to programming, hardware and software, networks, systems development life cycles and implications of computer use.

The course develops student's ability to:

- Think creatively, innovatively, analytically, logically and critically
- Apply skills in and an understanding of computing (including programming) in a range of contexts to solve problems
- Delve into producing graphical user interfaces and object-orientated programming solutions.

The course is suitable for students who

- Are looking to develop an advanced understanding of computer science
- Want to apply their coding ability to solve real-world problems
- Are looking at a computing orientated degree
- Are aiming to work in the computing industry skills and talents.

# **Course Content**

- Paper 1: Computer Systems [External Exam 40%]
- Paper 2: Algorithms & Programming [External Exam 40%]
- Paper 3: Programming Project [Non-Exam Assessment 20%]

The Non-Exam Assessment requires students to analyse a problem, and design, develop then test and evaluate and document a program. The program must be to solve it written in a suitable programming language.

# **Career Opportunities**

Having this broad range of knowledge can lead to a variety of opportunities in the technology industry such as software development, data analytics, network engineering, cybersecurity, IT consulting and many more.

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Please note, the stated information is provisional and subject to change.