

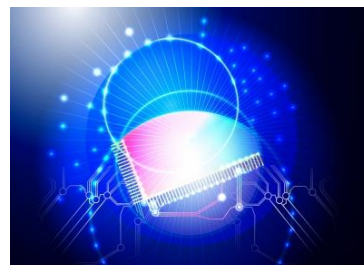
COMPUTER SCIENCE

We offer the Advanced GCE in Computer Science which consists of 4 units of study over 2 years. The exam board is likely to be AQA, but it will be a new syllabus. It is a mixture of theory and practical programming work.

AIMS OF THE COURSE

Encouraging student to develop:

- an understanding of, and the 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 for thinking creatively, innovatively, analytically, logically and critically
- the capacity to see relationships between different aspects of computer science
- mathematical skills related to:
 - Boolean algebra
 - comparison and complexity of algorithms (A-level only)
 - number representations and bases
- the ability to articulate the individual (moral), social (ethical), legal and cultural opportunities and risks of digital technology



A – Paper 1	40% of A Level On-screen exam
A – Paper 2	40% of A Level Written exam
A - Non-exam assessment	20% of A level Practical programming problems

PRIOR LEARNING

Candidates beginning this course do not have to have studied Computer Science before, although a good level of mathematical problem solving ability and resilience is essential, as is an interest in programming.

PROGRESSION

A Level Computer Science provides a suitable foundation for the study of Computer Science, Digital Technologies, Digital Forensics or related courses in higher education. Please note that most universities would expect entrants onto Computer Science courses to be taking A level Mathematics as well.

TEACHER CONTACT: Mr March

