COMPUTER SCIENCE (GCSE)

Examination Board **AQA**

Overview of the course

The GCSE in Computer Science offers students an insight into the role and relevance of computing in the modern world. Students who opt for this subject will no doubt have already gained a range of subject knowledge from their own personal interest computers and programming. The course will provide an in-depth understanding of how computer technology works and a 'behind the scenes' look at the workings of computer systems. It will also require students to understand a programming language in detail (currently this is Python) and how to use this language to plan, write and test computer programs.

Students who opt for the AQA Computer Science GCSE will have five periods per timetable cycle for the option to complete their work.

The course will:

- Enable you to have a detailed and in depth knowledge of how computer technology works at a coding and logical level
- Develop understanding and use of algorithms and their use in the computer industry
- Develop programming techniques to allow you to resolve problems in the real world by writing software
- Understand the responsibility and wider impacts of computing on people and society
- Prepare you for further study or employment in the field of computer science
- Develop your logical thinking, problem solving and mathematical abilities

Course content

Paper 1 : Computational thinking and problem solving

Computational thinking, problem solving, code tracing and applied computing as well as theoretical knowledge of computer science from algorithms, programming, data representation and computer systems.

Paper 2 : Written assessment

Theoretical knowledge of computer science from data representation, computer systems, computer networks, cyber security, ethical/legal/privacy and environmental impacts on wider society.

How you will be assessed

Paper 1: Computational thinking and problem solving

What's assessed	Computational thinking, problem solving, code tracing and applied computing as well as theoretical knowledge of computer science.
How it's assessed	Written exam set in practically based scenarios: 1 hour 30 minutes 80 marks 50% of GCSE
Questions	A mix of multiple choice, short-answer and longer-answer questions assessing a student's practical problem solving and computational thinking skills.

Paper 2: *Written assessment*

What's assessed	Theoretical knowledge from computer science.
How it's assessed	Written exam: 1 hour 30 minutes 80 marks 50% of GCSE
Questions	A mix of multiple choice, short-answer, longer-answer and extended response questions assessing a student's theoretical knowledge.

Results will be graded on a nine point scale: 1 to 9 – where 9 is the best grade.

Post-16 courses available

Students who have taken a Computer Science GCSE and who then progress to study the subject at A Level or university will have an advantage over those who are joining the subject at later levels.

Computer Science continues to have a growing importance in the modern world, meaning there will be a greater demand for professionals who are qualified in this area. You'll find this course provides the ideal stepping stone to A Level, employment or university.