

## Course Title: GCSE Computer Science (J277)

Awarding Body: OCR

Further information available from: Mr Davidson

Technology has never been so prevalent in our day to day lives. You are now growing up in a society that is almost totally reliant on technology that improves our standard of living, makes our jobs easier and enables us to work and communicate in ways that were impossible only a short time ago. The best part about this is that it's only just beginning – the entire of computing history fits easily in to one person's life time, and the pace of change is incredible. The technology you have in your pocket today was unimaginable 10 years ago and will be unimaginably old and outdated in 10 years' time.

The aim of the Computer Science GCSE is to enable you to not only understand how these systems work, but also to examine the wider impact that technology is having for good and bad on all of our lives. You will learn about how computers and the internet work, security issues, how software works and, most importantly of all, you will learn how to take control of computer systems through programming.

Programming enables you to manipulate a machine in any way you like – to get it to do whatever you want, from creating a game to coding a monitoring system that sends you a picture message every time someone rings your door bell. All of this is possible, and more, with a little programming knowledge.

You do not need previous programming experience to take this course, but you will have experience from your Year 7 – 9 lessons that should enable you to progress smoothly through the course. You do need an interest in technology and a creative, curious mind set!

GCSE Computer Science offers students a clear pathway to go on to study our A Level in Computer Science which can lead to a range of careers in technology, programming, computer aided design, cyber security, forensics and other fields. Many of our students often go on to then study Computer Science at degree level.

This GCSE course is graded on the new 9 – 1 system and consists of three sections. All assessment is taken at the end of Year 11.

1. Computer Systems – Written Exam (50%)
2. Computational Thinking, Algorithms and Programming – Written Exam (50%)
3. Programming Project Coursework (Not awarded a grade but compulsory and essential programming practise)