Computer Science

GCSE Computer Science helps you think about how technology is created. It allows you to understand how people work together with computers to develop world changing programmes like Facebook, Spotify and eBay. You'll also develop the skills that further education, universities and employers are looking for.

Over the course you will cover the following:

- Computational thinking
- Theoretical content
- Aspects of software development

"I enjoy the challenge that comes with computer science as it forces you to do your absolute best. I picked Computer Science as I have always had a love for technology and Maths and this course gives both. I believe it will help me in the future as it opens up a lot of new opportunities for jobs" **Year 10 student.**

"I feel the greatest aspect of the Computer science course is that that it covers a large range of ability between students. People who have previous experience and knowledge in computing have just as much fun as those who are new to the concept and have very limited knowledge particularly involving programming" **Year 11 student.**

Our KS3 curriculum

	Course Contents	
Computer Science is taught to all Year 9 students in an 8-week block.	• Computational Thinking • Searching Algorithms • Sorting Algorithms • Boolean Logic Problems	• Digital Storage of Sound and Images • Computers hardware and Software • Computer Coding in Python • Cyber Safety and Security

Our KS4 curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 10	Fundamentals of Algorithms	Programming Theory part 1	Fundamentals of Data Representation	Programming Theory part 2	Computer Systems	Computer Networks
Year 11	20-hour AQA computer programming project	Fundamentals of Cyber Security	Ethical, Legal and Environmental Impacts of Digital Technology	Revision	Revision	Exam

Preparation for the course:

To help prepare for the course students can find plenty of resources online, here are some recommendations:

https://www.python.org/ (You can download the Python coding platform here and practice your coding)

https://www.learnpython.org/ (Lots of free lessons, from the basics to experts!)

Exam specification:

AQA GCSE Computer Science

https://www.aqa.org.uk/subjects/computer-science-and-it/gcse/computer-science-8520