

Computer Science

GCSE Computer Science covers a breadth and depth of knowledge that allows users to understand the technology around us at its most basic level, and develops the skills needed to innovate and create new technologies in a modern society. It covers 10 distinct topics that are examined across two terminal exam papers in Year 11 – both of these papers provide 50% of the final GCSE Computer Science grade. Students study academic and practical elements covering Component 01 – ‘Computer Systems’ and Component 02 ‘Computational thinking, algorithms and programming’. Students will also complete a programming project, which introduces the concepts of the Software Development Life Cycle and capitalises on the practical programming unit covered in Year 10, where students learn to program in Python, a high-level language.

Our curriculum at KS4 is as follows:

Year 10 GCSE Computer Science
Memory and Storage Systems Architecture Algorithms Producing robust programs Programming fundamentals
Year 11 GCSE Computer Science
Computer Networks, connections and protocols Network security Systems software Ethical, legal, cultural and environmental impacts of technology Boolean Logic Programming languages and Integrated Development Environments

