Computer Science GCSE

Staff Contact: Mr Huntbatch or Mr Smith

Exam Board: OCR

Computer Science explores the principles of digital technology and ‘computational thinking’, with coding as a core of the course. Learners should be able to think logically, solve puzzles and be resilient when the going gets tough; however it is also creative and you’ll get a real buzz out of getting something to work, especially when programming.

What will I study?

J277/01: Computer systems 1.1 Systems architecture

1.2 Memory and storage

1.3 Computer networks, connections and protocols

1.4 Network security

1.5 Systems software

1.6 Ethical, legal, cultural and environmental impacts of digital technology

J277/02: Computational thinking, algorithms and Programming

2.1 Algorithms

2.2 Programming fundamentals

2.3 Producing robust programs

2.4 Boolean logic

2.5 Programming languages and Integrated Development Environments

Practical Programming

All students will be given the opportunity to undertake a programming task(s), either to a specification or to solve a problem (or problems), during their course of study. Students may draw on some of the content in both components when engaged in Practical Programming.

Assessment

J277/01: Computer systems J277/02: Computational thinking, algorithms and Programming

Written paper: 1 hour and 30 minutes 50% of total GCSE 80 marks

Written paper: 1 hour and 30 minutes 50% of total GCSE 80 marks

Practical Programming Not assessed

Progression Routes - What could I do next with GCSE Computer Science?

Computer Science GCSE is an excellent preparation in fundamentals for the study of the subject at A-Level or a number of vocational courses and apprenticeships. Computer Science and the problem solving and ICT skills it develops can be useful in many different careers such as information technology and information management, engineering and manufacturing, software and games design, construction, broadcast media and performing arts, management, journalism and publishing, and medical technology