



GCSE

Computer Science

Course description

*Please note this is a new course running from September 2022 and may be subject to change and an induction programme

OCR's GCSE (9–1) in Computer Science will encourage learners to:

- Understand and apply the fundamental principles and concepts of Computer Science, including abstraction, decomposition, logic, algorithms, and data representation
- Analyse problems in computational terms through practical experience of solving such problems, including designing, writing and debugging programs
- Think creatively, innovatively, analytically, logically and critically
- Understand the components that make up digital systems, and how they communicate with one another and with other systems
- Understand the impacts of digital technology to the individual and to wider society
- Apply mathematical skills relevant to Computer Science



Head of Department

TBC



Exam Board

OCR



Number of timetabled periods per fortnight:

7



Equivalent number of GCSEs awarded:

1



Exam Board website

School website

Assessment

Component 01: Computer systems

Introduces students to the central processing unit (CPU), computer memory and storage, wired and wireless networks, network topologies, system security and system software. It also looks at ethical, legal, cultural and environmental concerns associated with computer science.

Component 02: Computational thinking, algorithms and programming

Students apply knowledge and understanding gained in component 01. They develop skills and understanding in computational thinking: algorithms, programming techniques, producing robust programs, computational logic, translators and data representation. The skills and knowledge developed within this component will support the learner when completing the Programming Project.

Programming Project

Students use OCR Programming Project tasks to develop their practical ability in the skills developed in components 01 and 02. They will have the opportunity to define success criteria from a given problem, and then create suitable algorithms to achieve the success criteria. Students then code their solutions in a suitable programming language, and check its

