

COMPUTER SCIENCE KS4

Curriculum Overview

OCR GCSE Computer Science J277 covers essential computing concepts, including computational thinking, algorithms, data structures, and programming. Students learn to design, develop, and test using programming languages like Python. The course also explores computer hardware, software, networks, and cyber security. Topics such as data representation, databases, and the impact of technology on society are also included. The course aims to build problem-solving skills and understanding of how computers work, preparing students for further study or careers in technology.



Specification link

https://www.ocr.org.uk/qualifications/gcse/computerscience-j277-from-2020/specification-at-a-glance/



Regular topic based assessments using exam style questions throughout both school years. Mock exams take place 3 times over the course to help prepare students for the real exam in year 11.

The final exams/ assessment:

Assessment is through two exams: one on computer systems and the other on computational thinking and programming.

Home Learning expectations

Students are expected to have an interest in one or more areas within computer science. Practising programming is the most common home based activity, but in addition students can explore coding through game design, web development among other activities.

Students are encouraged to engage with their workbooks and ensure these are kept up to date. Each workbook has a video resource which will guide students through all key aspects of the course.