



Computer Science GCSE

Examining Board: OCR

The focus in Year 9 will be on designing and creating a wide range of programs in languages such as Visual Basic and Python. The GCSE students have increased access to our range of hardware platforms including Android tablets, Raspberry Pis and a selection of robotic kits. The practical work develops strong logic and problem-solving skills, as well as helping to build independence and resilience when faced with tricky challenges. All key aspects for the designing, creating and testing elements of GCSE will be covered in this first year.

In Year 10, focus shifts to the theory aspects of the course, examining the fundamentals of how computers work. This includes looking at CPU architecture, hardware devices, networking, binary logic and data representation. We will also examine the effects of increased computerisation and the ethical, legal and environmental impact of digital technologies. Practical work takes on a more extended and in-depth nature, with larger projects.

In Year 11, the emphasis is on assessment and preparation for the final exams. Previous topics will be revisited with a little additional depth and with an increasing focus on exam skills and techniques to ensure that students are ready to achieve the highest grades. Students will also complete an extended programming project.

The Computer Science GCSE course is frequently updated to reflect changing technology and is subject to change over the next few years. In its present format, students will face 2 final exams, both written papers of 1.5 hours.

There are a number of extra-curricular opportunities available to students. In addition to the regular Raspberry Pi and Programming Clubs, GCSE students are expected to assist with outreach workshops run by K.E.S. for local primary schools.