

Computer Science Curriculum Statement

Computer Science is taught in all key stages. It incorporates knowledge of how computers work, how computers are used, programming skills, digital literacy and safety.

Key Stage One

Pupils are introduced to computers and taught how to use them across the curriculum. They write and test simple programs on computers and using equipment such as bee-bots and programmable toys. They learn how to communicate safely online – learning what personal information is and how to keep it private.

Key State Two

Pupils develop their programming skills using software such as scratch by learning how to decompose problems, introduce variables, test programs and find and correct errors. They learn how the Internet works and how to use it efficiently and safely. Their digital skills are used with increasing efficiency across the curriculum.

Key Stage Three

Pupils develop their programming skills using software such as scratch and text based programs such as python and logo. They learn how computers work – the hardware and software involved, how binary is used to represent data, and how the computer executes instructions. They use software to produce documents combining information that are suitable for audience and purpose. In year 9 pupils begin work on the BTEC IT qualification and complete entry level computer science.

Key Stage 4

All pupils have computing lessons in Key Stage 4, some also opt to do GCSE Computer Science. All pupils complete units towards the BTEC IT qualification. This is available at entry level, level 1 and level 2. It involves completing units on using computer software, setting up computers, using e-mail and the Internet etc. GCSE computer science involves completing coursework on two programming tasks as well as working towards an exam in the theory of computing.