



Computing Curriculum Intent:

The Computing Curriculum encompasses multiple subjects throughout the 3 Key stages for 11-18 year olds. Computing is used as the overarching term for these multiple subjects.

At KS3, students will study Computing as this offers the students the broadest experiences of the subject. During KS3, students will study a range of topics that focus on developing students' computational thinking and ability to solve problems creatively by revisiting common concepts across multiple different languages. To support this, IT literacy is embedded throughout the three-year course. The foundations provided at KS3 allows students to be successful at KS4. High levels of emphasis are placed on students becoming resilient, independent learners who are able to accept that failure can be a good thing. Based upon students experiences at KS3, at KS4 they can choose a specialised course in either Computer Science or a creative qualification. GCSE Computer Science is taught with a strong emphasis on programming to embed core concepts that transfer throughout the entire course. Creative iMedia allows students to take a more creative approach by developing digital products following a typical project life cycle. At Key Stage 5, students are able to specialise in an IT qualification to further develop their skills and knowledge.

Computing Curriculum Implementation

KS3 Computing: There is a strong emphasis on programming throughout the whole of Key Stage 3. Students will be able to experience programming across multiple different languages, ranging from visual block-based programming, similar to Scratch, to text-based programming languages such as Python. Throughout Key Stage 3 the topics taught allow students to become digitally literate and be able to use, express and develop ideas through information technology.

KS4 Computer Science: Students learn and understand the fundamental principles and concepts of computer science. They analyse problems creatively, logically and critically. This is achieved through the use of programming. They learn the components that make up digital systems and how they communicate with one another. There is a strong emphasis on programming throughout the course.

KS4 Creative iMedia: There is a strong emphasis on transferable skills throughout the course as students are required to conduct research, plan activities and provide critical evaluations of projects.

KS5 IT: The course comprises of five units that are assessed evenly throughout the two years of the course. During the first year of the course, student's study two mandatory units in; Fundamentals of IT and Global Information. Fundamentals of IT prepares students with knowledge of hardware, software, networks and how business use IT. Global information allows students to discover how good management of data and information can give businesses and organisations a competitive edge. During the second year of the course, students undertake multiple coursework elements such as Project Management and Internet of Things. The different coursework elements allow students to practically demonstrate their IT skills in a manner useful for future employment.