Overall intent statement

Our ambitious, knowledge-rich and engaging Computer Science and Information Technology curriculum aims to provide high-quality teaching to evoke students use of computational thinking and creativity to understand and change the world. The curriculum will teach students key knowledge about how computers and computer systems work, and how they are designed and programmed. Students will gain key knowledge and skills in the three main areas of the computing curriculum: Computer Science (programming and understanding how digital systems work), Information Technology (using computer systems to store, retrieve and send information) and Digital Literacy (evaluating digital content and using technology safely and respectfully). The objectives within each strand support the development of learning across the key stages, ensuring a solid grounding for future learning and beyond.

Intent statements by Key Stage

	Subject-based curriculum
Key Stage 3	Students undertake creative projects that involve selecting, using, and combining multiple applications within this subject. There is an equal divide between leading students towards a Computer Science pathway or down an IT route in order that can make this choice effectively should they wish to do so. A mix of different programming languages are used, at least one of which is textual, to solve a variety of computational problems to develop modular programs that use procedures or functions. Students are taught to create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability. In addition, students are made aware of the range of ways to use technology safely, respectfully, responsibly and securely.
Key Stage 4	At Key Stage 4 the department is keen to ensure the qualifications will engage and prepare learners for either academic or vocational progression post-16. The qualifications will broaden learners' experience and understanding already taken place at Key Stage 3. Therefore, the opportunity to study Computer Science GCSE or an IT qualification is on offer as part of the curriculum. The focus is on building skills to show aptitude and improving of understanding. The aim is to allow students to acquire a deeper interest in the content to stimulate confidence in what can be a difficult and challenging subject.
Key Stage 5	As with Key Stage 4 the choice to offer either Computer Science or a BTEC Qualification is available dependent upon the cohort. Computer Science and the digital sector is a major source of employment in the UK. Digital skills span all industries; almost all jobs in the UK today require employees to have a good level of digital literacy. Programmers are needed in all contexts from game design to artificial intelligence to complex data analysis. At this level the aim is to really specialise in certain applications to develop models, programs or applications that can be used in the real world.