ICT

KEY STAGE 3 COMPUTING (YEARS 7 & 8)

In Years 7 & 8 students receive one lesson of computing per week. The curriculum is based around developing three aspects of the computing curriculum: Digital Literacy, Information Technology and Computer Science.

Digital Literacy is the ability to effectively, responsibly, safely and critically navigate, evaluate and create digital artefacts using a range of digital technologies.

Information Technology is concerned with how computers and telecommunications equipment work and how they may be applied to the storage, retrieval, transmission and manipulation of data.

Computer Science is the scientific and practical study of computation: what can be computed, how to compute it and how computation may be applied to the solution of problems.

Skills learnt in Year 7 & 8 include creating apps, block based programming and text based programming, computer hardware and internet safety. They will also present their projects by creating podcasts, short videos, animation, word processed documents and interactive presentations and multimedia products.

KEY STAGE 4 INFORMATION TECHNOLOGY (YEARS 9-11)

This is a vocationally-related qualification that takes an engaging, practical and inspiring approach to learning and assessment. The everyday use of ICT, from PCs to smartphones, now impacts all of our lives. The course provides students with a solid understanding of IT which they can use in their working lives.

KEY STAGE 4 COMPUTER SCIENCE (YEARS 9-11)

For GCSE Computing we offer the OCR GCSE in Computing Science where students have the opportunity to learn real, in-depth understanding of how computer technology works. The course gives them an insight into what goes on 'behind the scenes' and provides excellent preparation for higher study

and employment in the field of computer science.

Focus on cyber security: one of the big topics in this course is cybersecurity which looks at phishing, malware, firewalls and people as the 'weak point' in secure systems, which students will study for the first time at this level.

A greater emphasis on 'computational thinking': students can learn computational theory and apply it in real life situations, using python language.

Encourages mental versatility: students use their new-found programming skills on an independent coding project by solving a real-world problem of their choice.