

Curriculum Summary Document

Year 9 – Computing

Module/Unit of Learning	Taught During	What will students learn?	How does this prepare students for transition into Key Stage 4?	Links to other Subjects
Computer Science Theory	Sept – Dec	Students deepen understanding of core computing principles including hardware, software, binary and hex, data representation of images and sound, compression, encryption, logic gates and cybersecurity. Activities include practical conversions, diagram work, case studies and an end-of-unit assessment.	This unit prepares students for Key Stage 4 by introducing GCSE-style theory content. Students build secure foundations in hardware, logic, data representation and security—core concepts needed for success at KS4.	Maths Science Design Technology
Digital Images	Jan – March	Students learn bitmap and vector graphics and apply editing techniques such as layers, masks, effects and composite image creation. They develop creative and technical understanding of how digital images are constructed and manipulated.	This unit prepares students for Key Stage 4 by strengthening digital media skills used in GCSE Computer Science and Creative iMedia. Understanding image representation helps bridge KS3 to KS4 theory and coursework expectations.	Art & Design Media
Programming with Microbits	March – July	Students develop programming skills using Microbits and robots, progressing from input/output to loops, conditionals, events, sensors and motor control. They design, test and refine programs that control physical devices.	This unit prepares students for Key Stage 4 by deepening understanding of structured, modular and event-driven programming. Hands-on physical computing builds readiness for GCSE programming tasks and embedded-systems concepts.	Science Maths Design Technology