

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