



Computer Science: Curriculum Overview
Year 10

Half Term	Topic studied	What will I learn?	How will I be assessed?
Year 10 Autumn	Operating systems Programming	<ul style="list-style-type: none"> • The purpose and functionality of operating systems • User interface • Memory management and multitasking • Peripheral management and drivers • User management o File management 	<p>Students are required to flip between Theory and Programming. One lesson will be on Theory, with the next lesson on Programming.</p> <p>After each unit is complete, pupils will be tested and a level awarded.</p> <p>Students will also receive a programming test twice per term. A level is awarded.</p>
Year 10 Spring	Utility software Ethics, legal, cultural and environmental impact. Programming	<p>Utility Software</p> <ul style="list-style-type: none"> • The purpose and functionality of utility software • Utility system software • Encryption software • Defragmentation • Data compression <p>Ethics, legal, cultural and environmental impact.</p> <ul style="list-style-type: none"> • Ethical, legal and cultural issues • Privacy laws • Data Protection Act • Computer Misuse Act • Copyright Designs and Patents Act • Software Licences 	<p>Students are required to flip between Theory and Programming. One lesson will be on Theory, with the next lesson on Programming.</p> <p>After each unit is complete, pupils will be tested and a level awarded.</p> <p>Students will also receive a programming test twice per term. A level is awarded.</p>
Year 10 Summer	Computational thinking Designing Algorithms	<p>Computational thinking</p> <ul style="list-style-type: none"> • Abstraction • Decomposition • Algorithmic thinking <p>Designing algorithms</p> <ul style="list-style-type: none"> • Identify the inputs, processes and outputs for a problem • Create, interpret, correct, complete and refine algorithms • Pseudocode • Flowcharts • Reference language/high-level programming language • Identify common errors • Trace tables 	<p>Students are required to flip between Theory and Programming. One lesson will be on Theory, with the next lesson on Programming.</p> <p>After each unit is complete, pupils will be tested and a level awarded.</p> <p>(Summer Mock Test) Students will also receive a programming test twice per term. A level is awarded</p>