

Curriculum Overview – GCSE Computer Science

Autumn 1	<p>Computer Systems – Components of a computer system</p> <ul style="list-style-type: none"> • CPU • Memory • System Performance • Secondary Storage • Systems Software
Autumn 2	<p>Computer Systems – Data Representation</p> <ul style="list-style-type: none"> • Units • Binary Numbers • Hexadecimal Numbers • Characters • Images, Sound and Compression
Spring 1	<p>Computer Systems – Networks</p> <ul style="list-style-type: none"> • LANS and WANS • Hardware • Topologies • Protocols <p>Computer Systems – Issues</p> <ul style="list-style-type: none"> • Ethical and Cultural Issues • Environmental Issues • Computer legislation
Spring 2	<p>Computational Thinking - Algorithms</p> <ul style="list-style-type: none"> • Writing Algorithms • Search / Sorting Algorithms <p>Programming</p> <ul style="list-style-type: none"> • Basics / Strings / Flow • Constants and variables • Boolean logic • Random numbers • Arrays • File Handling • Storing and Searching
Summer 1	<p>Computational Thinking – Design Testing and IDEs</p> <ul style="list-style-type: none"> • Structured programming • Defensive design • Testing • Trace tables • Translators • IDEs • Interpreted and Compiled languages
Summer 2	Exams for Year 11 and Programming for Year 10