



Curriculum Plans – Key Stage 5 Computer Science

Please find below a detailed outline of the curriculum covered in Computer Science through Year 13 in Key Stage 5.

Year 13

	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7
	<p>Computational Thinking and problem solving, Algorithm Design Methods, Data Representation</p> <p>Communication and Internet Technologies</p> <p>Computational thinking is a problem solving process where a number of steps are taken in order to reach a solution, rather than relying on rote learning to draw conclusions without considering these conclusions</p>	<p>Boolean algebra and logic circuits, processor and computer architecture, recursion, further programming</p> <p>Boolean Algebra provides a simplified way of writing a logic expression and a set of rules for manipulating an expression.</p>	<p>System Software, Security, Object-orientated programming, low-level programming.</p> <p>Before considering the purposes of an OS we need to present the context in which it runs. A computer system needs a program that begins to run when the system is first switched on.</p> <p>The purposes of an operating system can usually be considered from two viewpoints an internal viewpoint and an external viewpoint</p>	<p>Artificial Intelligence (New syllabus)</p> <p>This unit from the new syllabus looks at the A* and Dijkstra Algorithms used in Artificial Intelligence. The module also covers the different types of AI, AI learning and uses of AI as well as a look at the security and ethics of AI.</p>	<p>Monitoring and control systems, Declarative programming Software development</p> <p>Monitoring can be used to describe a very wide range of activities but all are characterised by the measurement of some physical property. There can only be one of two reasons to monitor a system.</p>	<p>REVISION/REVIEW & EXAMINATION</p>	
Assessment	Exam	Exam	Exam	Exam	Exam	Exam	