



## Curriculum Plans – Key Stage 4 Computer Science

Please find below a detailed outline of the curriculum covered in Computer Science through Year 11 in Key Stage 4.

### Year 11

	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7
	<p><b>Memory and Storage, media and Python review</b></p> <p>Students will learn about primary, secondary and offline storage.</p> <p>Multimedia file formats and file size calculations will be reviewed.</p> <p>The concepts of sequence, selection and iteration will be reviewed in Python.</p>	<p><b>Input and output devices and Python programming</b></p> <p>Students will learn about a range of input and output devices and how they work.</p> <p>Students will review data structures and validation in Python.</p>	<p><b>Algorithm planning and testing methods and pre-release preparation:</b></p> <p>Students will learn about pseudocode, flowcharts, trace tables, structure charts.</p> <p>Students will also review logic gates and circuits.</p> <p>Students will start to write solutions to the 2022 pre-release for their June exam using Python.</p>	<p><b>Communication and Networks, High and low level languages and their translators and pre-release preparation:</b></p> <p>Students will learn about how computers communicate in networks and transmission of data over the internet, including HTML and CSS used to build webpages.</p> <p>Students will also review Computer architecture, high and low level languages.</p> <p>Students will continue with pre-release preparation.</p> <p>The Mock exam will also take place in this block.</p>	<p><b>Databases, Data Structures / ethics and security, test data in programming and pre-release preparation:</b></p> <p>Students will learn what databases are used for, how they are structured and the practical uses of a database with some SQL learning included.</p> <p>Students will continue and complete their pre-release work, and learn about test data in programming.</p>	<p><b>REVISION/REVIEW &amp; EXAMINATION</b></p>	
<b>A s s e s s m e n t</b>	<b>Exam</b>	<b>Exam</b>	<b>Exam</b>	<b>Exam</b>	<b>Exam</b>	<b>Exam</b>	
			Pre-release coursework (Assessed through the June paper 2 examination)	Pre-release coursework (Assessed through the June paper 2 examination)	Pre-release coursework (Assessed through the June paper 2 examination)		