

	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
7	<b>Introduction to ICT &amp; E-Safety</b> <ul style="list-style-type: none"> <li>Introduction to the school network &amp; peripherals</li> <li>Cyber-bullying &amp; fake news</li> <li>Protective strategies to stay safe online</li> <li>Online messaging services</li> </ul>	<b>Computing Fundamentals</b> <ul style="list-style-type: none"> <li>Historical context of computer science</li> <li>Hardware and software fundamentals</li> <li>Dangers of illegal software</li> </ul>	<b>Programming -Scratch Game Design</b> <ul style="list-style-type: none"> <li>Understanding Algorithms</li> <li>Creating programs with sequences and iteration (loops)</li> <li>Creating programs with selection (IF, ELSE)</li> </ul>	<b>Computing Fundamentals</b> <ul style="list-style-type: none"> <li>IPOS (input, process, output, storage) model</li> <li>Storage devices and the CPU</li> <li>Understanding computer networks</li> </ul>	<b>Control, Flowcharts and Algorithms</b> <ul style="list-style-type: none"> <li>Creating systems that use simple loops and basic outputs.</li> <li>Investigating systems that have multiple inputs and outputs.</li> <li>Refining solutions using subroutines and variables.</li> </ul>	<b>Python basics</b> <ul style="list-style-type: none"> <li>Have an understanding of Syntax, Arithmetic, Comparison Operators, WHILE Loops, Data Types &amp; IF statements</li> </ul>
8	<b>Introduction to ICT &amp; Online Safety</b> <ul style="list-style-type: none"> <li>Social media risks</li> <li>Consequences of unsafe web use</li> <li>Online protective behaviours and strategies</li> <li>Safe and secure operation of technology</li> <li>Understanding Binary</li> </ul>	<b>Programming Kodu – Game Design</b> <ul style="list-style-type: none"> <li>Design programs that use repetition and two-way selection</li> <li>Design solutions by decomposing a problem and creates a sub-solution for each part</li> </ul>	<b>Core Computing Concepts</b> <ul style="list-style-type: none"> <li>Boolean logic and circuits.</li> <li>Truth tables</li> <li>Data representation – Bitmap</li> <li>Data representation – Sound</li> <li>Searching algorithms</li> <li>Sorting algorithms</li> </ul>	<b>Python basics</b> <ul style="list-style-type: none"> <li>Output, Variables &amp; Input</li> <li>Maths, Maths with variables</li> <li>Selection</li> <li>Iteration (loops)</li> <li>Lists</li> <li>Subroutines</li> </ul>	<b>Introduction to Spreadsheets (collecting and analysing data)</b> <ul style="list-style-type: none"> <li>Learners will collect, analyse, and manipulate data, before turning it into graphs and charts.</li> <li>How to use cell references, fill colours, and borders, and are familiar with the basic functions</li> </ul>	<b>Introduction to Databases</b> <ul style="list-style-type: none"> <li>What is a database, Data-Types-and-Primary-Keys, Relational-Databases, Forms, Validation-and-Verification, Queries, Reports &amp; SQL</li> </ul>
9	<b>Advanced Spreadsheets (collecting and analysing data)</b> <ul style="list-style-type: none"> <li>Learn how to use spreadsheets to store and manipulate data.</li> <li>How to extract data to create visual representations and using charts.</li> <li>Making predictions, and answer “what if...?” questions</li> </ul>	<b>Programming in Python</b> <ul style="list-style-type: none"> <li>Understanding IO and Variables, Selection, Iteration – FOR Loops, Iteration – WHILE Loops.</li> </ul>	<b>Video Editing</b> <ul style="list-style-type: none"> <li>Design Specification &amp; Success Criteria</li> <li>Assets collecting &amp; Storyboarding</li> <li>Serif video techniques &amp; editing</li> <li>Video Creation &amp; Testing</li> </ul>	<b>Exploring User Interface Design Principles</b> <ul style="list-style-type: none"> <li>Investigating user interface designs for individuals &amp; their purposes</li> </ul>	<b>Website Design</b> <ul style="list-style-type: none"> <li>Learning the basics of creating a webpage</li> <li>Structuring webpages effectively</li> <li>Using graphics software to create images for use on a webpage</li> <li>Add a page with tips for safer browsing online</li> </ul>	<b>Cyber Security</b> <ul style="list-style-type: none"> <li>Social engineering</li> <li>Data threats</li> <li>Malicious scripts</li> </ul>
10	<b>Component 1: Exploring User Interface Design Principles &amp; Project Planning Techniques</b> <ul style="list-style-type: none"> <li>LA. A: Investigate user interface design for individuals and organisations</li> <li>LA. B: Use project planning techniques to plan and design a user interface</li> <li>LA. C: Develop and review a user interface</li> </ul>			<b>Component 2: Collecting, Presenting &amp; Interpreting Data</b> <ul style="list-style-type: none"> <li>LA. A: Investigate the role and impact of using data on individuals and organisations</li> <li>LA. B: Create a dashboard using data manipulation tools</li> <li>LA. C: Draw conclusions and review data presentation methods</li> </ul>		
11	<b>Component 3: Digital Working Practices</b> <ul style="list-style-type: none"> <li>LA. A: Modern technologies</li> <li>LA. B: Cyber security.</li> <li>LA. C: Implications of digital systems.</li> </ul>			<b>Component 3: Digital Working Practices</b> <ul style="list-style-type: none"> <li>LA. A: Modern technologies</li> <li>LA. B: Cyber security</li> <li>LA. C: Implications of digital systems</li> </ul>		