

## Year 7 Curriculum Plan

<b>Topic Communicating Information – Term 1</b>	<b>Topic Computer I/O Devices – Term 2</b>	<b>Topic C.S Binary- Term 3</b>
<p>Understanding and implementing how information is presented and processed using the correct application.</p> <p>Applications will be word and PowerPoint and will be formally assessed</p>	<p>Key Learning Points. To understand hardware &amp; software requirements of an information system.</p> <p>Content will be the different forms of input &amp; output devices and how they are used within the information systems.</p>	<p>Key Learning Points: Understand the language that a CPU uses to convert and execute instructions from plain text to binary.</p> <p>Key areas – What is binary? Binary conversions, binary to denary and reverse from nibble to byte.</p> <p>This will be formally assessed.</p>
<b>Topic C.S Logic Gates – Term 4</b>	<b>Topic Control – Term 5</b>	<b>Topic Scratch – Term 6</b>
<p>Key Learning Points: Understand how the ALU calculates binary from a given input to an output. How logic gates are used in every day devices.</p> <p>This will be formally assessed.</p>	<p>Key Learning Points. Control systems form part of everyday life and are usually managed in programme to control different systems.</p> <p>Flowol will; be reintroduced to fully understand how software can control a digitalised or electrical system.</p> <p>Practical test will be given.</p>	<p>Key Learning Points. Programming language at year 7 will be in a form of block code. This will involve understand how a sequence of instructions lead to an outcome.</p> <p>Concepts will include variables, loops, and code debugging.</p>

## Year 8 Curriculum Plan

<b>Topic – Hardware/ Software – Term 1 (CS)</b>	<b>Topic – CS Term 2 (CS)</b>	<b>Topic Scratch – Term 3 (CS)</b>
<p>Key Learning Points: More advanced understanding of how a CPU work, and how it control the hardware &amp; software in a computer system.</p> <p>Topics covered: Different types of software – Utility, application and operating systems. Identify application to suit task ie PowerPoints for presentation. This will be formally assessed.</p>	<p>Key Learning Points: Binary conversion using up to a byte, logic circuits using logic gates, Hexadecimal conversion and binary addition. Data storage – understanding KB, GB, MB.</p>	<p>Key Learning Points: Scratch project using more advanced programming techniques and instructions. This will include efficient programming using variable, loops and various other coding techniques. Mathematical functions will be used such as polygons.</p> <p>This will be formally assessed in a 1 hour test.</p>
<b>Topic – Web design – Term 4 (imedia)</b>	<b>Topic – Animation – Term 5 (IMedia)</b>	<b>Topic DTP (Imedia)</b>
<p>Key Learning Points: Understand basic concepts of html, designing and creating a web site based upon a brief. This will combine a number of components to form a fully functioning website.</p>	<p>Animation concepts</p>	<p>DTP understanding and implementation</p>

## Year 9 Curriculum Plan

### Topic – Animation Term 1 (imedia)

Key Learning Points: Understanding the concepts of the media industry, using industry standard software to design and create an animation for a specific audience.

This will be assessed by creating a 30 sec advert using Serif Draw plus or another associated programme.

### Topic – Graphic design – Term 2 (imedia)

Key Learning Points: Editing existing images and artefacts and optimise to suit the task – in this instance a magazine cover.

Skills covered: File types. Pixelated, optimisation, Compression, export, file size using serif draw or Photoshop.

### Topic – Computer Science – Term 3 (CS)

Key Learning Points: Advanced binary conversion using a number of different routes, this will include encryption and encryption keys, ASCII Code. This topic will continue into Term 4

This will be formally assessed.

### Topic – Computer science (cont..) Term (CS)

Key Learning Points: Follow on from Term 3- . Which binary conversion method to use for a more efficient outcome. Binary subtraction introduced and more logic gates and circuits.

This will be formally assessed.

### Topic – Multimedia product – Term 5 (Imedia)

Key Learning Points: To use existing skills from term 1 & 2 to create a fully functioning multimedia product that meets a target audience from a brief. Include audio editing and creation.

This will be assessed by creating a functioning multimedia product.

### Topic Programming Python (CS)

Book 1 and 2 introduction to python .