



## Year 7 ICT Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2 & Summer 1	Summer 2
Topic	Microsoft Teams	Using technologies safely and responsibly	Basic Skills Spreadsheets	Understanding Computers & Networks Programming Essentials	Microsoft Teams
Knowledge Covered	<ul style="list-style-type: none"> <li>• Use of MS Teams for Business and Education</li> <li>• Engaging with others using MS Teams</li> <li>• Using different features on MS Teams</li> <li>• Submitting work using MS Teams</li> </ul>	<ul style="list-style-type: none"> <li>• AUP</li> <li>• Secure password</li> <li>• Organise files on the cloud server</li> <li>• Positive use of social media and the internet - self-promotion</li> <li>• Be aware of personal online activity - actions and choices</li> <li>• Trusting online information</li> <li>• Problematic situations online e.g., grooming, cyberbullying, racism and how to get help</li> </ul>	<ul style="list-style-type: none"> <li>• Identify a target audience</li> <li>• Select tools in Word, Presentation software; Desktop publisher, to produce a range of documents for a target audience</li> <li>• Cell reference</li> <li>• Formatting spreadsheets</li> <li>• Data values, formula and functions used in modelling</li> <li>• Charts and graphs – visual representation of data</li> </ul>	<ul style="list-style-type: none"> <li>• Hardware components of the computer system</li> <li>• Software that run on the hardware</li> <li>• Input, process, and output systems</li> <li>• Networks – packets, routers, switches, internet protocols</li> <li>• The internet – A network of networks</li> <li>• The World Wide Web - linked data files and not the Internet</li> <li>• Computer Language – HTML</li> <li>• Algorithms</li> </ul>	<ul style="list-style-type: none"> <li>• Computer Language – Visual Programming (Kodu)</li> <li>• Sequencing</li> <li>• Selection</li> <li>• Repetition</li> <li>• Variables</li> <li>• Boolean statements and operators</li> </ul>
Online Resources	<ul style="list-style-type: none"> <li>• Microsoft Teams</li> <li>• Teach-ICT</li> <li>• SAM Learning</li> </ul>	<ul style="list-style-type: none"> <li>• Seneca</li> <li>• BBC Bitesize</li> <li>• idea.org.uk</li> </ul>		<ul style="list-style-type: none"> <li>• Code.org</li> <li>• Cyper Discovery</li> <li>• Craig n Dave</li> </ul>	



## Year 8 ICT Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Computer Crime & Cyber Security	Graphic Skills	Computational Thinking	Binary Representation	Block Based Programming	Intermediate Programming Skills: Introduction to Python (Guessing game)
Knowledge Covered	<ul style="list-style-type: none"> <li>• Computer Hacking</li> <li>• Malware</li> <li>• Phishing and Pharming</li> <li>• Cookies</li> <li>• Computer Misuse Act</li> <li>• Online Privacy</li> <li>• Personal Data</li> </ul>	<ul style="list-style-type: none"> <li>• Investigating graphics</li> <li>• Bitmap</li> <li>• Vector</li> <li>• Creating and Editing Graphics</li> <li>• Evaluating graphics</li> </ul>	<ul style="list-style-type: none"> <li>• Computational Thinking</li> <li>• Flow Charts</li> <li>• Pseudocode</li> <li>• Searching Algorithms</li> <li>• Bubble Sort</li> <li>• Insertion Sort</li> </ul>	<ul style="list-style-type: none"> <li>• Binary Numbers</li> <li>• Adding Binary</li> <li>• Hexadecimal</li> <li>• Characters</li> <li>• Images</li> </ul>	<ul style="list-style-type: none"> <li>• Motion and Looks</li> <li>• Controlling Sprites and loops</li> <li>• Sensing events and Keeping score</li> <li>• Planning a virtual pet</li> <li>• Completing virtual pet with additional features</li> <li>• Evaluating</li> </ul>	<ul style="list-style-type: none"> <li>• Write simple Python programs</li> <li>• Syntax errors</li> <li>• Using simple arithmetic statements</li> <li>• Using logical expressions</li> <li>• Iteration</li> </ul>
Online Resources	<ul style="list-style-type: none"> <li>• Microsoft Teams</li> <li>• Teach-ICT</li> <li>• SAM Learning</li> </ul>		<ul style="list-style-type: none"> <li>• Seneca</li> <li>• BBC Bitesize</li> <li>• idea.org.uk</li> </ul>		<ul style="list-style-type: none"> <li>• Code.org</li> <li>• Cyper Discovery</li> <li>• Craig n Dave</li> </ul>	



## Year 9 ICT Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	<b>Graphical User Interface</b>	<b>Mobile App development</b>	<b>Legislation Promotional Materials</b>	<b>Networks and Encryption</b>	<b>Text Based Programming</b>	<b>Advanced Programming skills: Programming Project</b>
Knowledge Covered	<ul style="list-style-type: none"> <li>User Interface introduction and uses</li> <li>Effective graphical user interfaces</li> <li>Designing a graphical user interface</li> <li>Creating a graphical user interface</li> <li>Evaluating a graphical user interface</li> </ul>	<ul style="list-style-type: none"> <li>Mobile App Introduction</li> <li>User Needs</li> <li>Design screens</li> <li>App Lab – app development</li> <li>Pitching your mobile phone app</li> <li>Presenting your mobile phone app – including reviewing and evaluating</li> </ul>	<ul style="list-style-type: none"> <li>Computer Misuse Act cont.</li> <li>Creative commons license</li> <li>Copyright &amp; Patents Act</li> <li>Data protection Act</li> <li>GDPR</li> <li>Freedom of Information Act</li> <li>Software License</li> <li>The purpose of digital graphics</li> <li>9. Planning, Creating and Evaluating a promotional flyer</li> </ul>	<ul style="list-style-type: none"> <li>Networks</li> <li>Network hardware – including advantages and disadvantages</li> <li>Network topologies</li> <li>Encryption</li> </ul>	<ul style="list-style-type: none"> <li>Problem-solving</li> <li>Small Basics Introduction</li> <li>How we interact</li> <li>Variables</li> </ul>	<ul style="list-style-type: none"> <li>Reconnecting with Python – writing simple programs to display messages</li> <li>Creating lists in Python</li> <li>Common Operations</li> <li>Using iteration</li> <li>Strings</li> <li>Variables (comparing small basics v's Python)</li> <li>Developing meaningful solutions to problems</li> <li>Testing solutions</li> <li>Evaluating future solutions</li> </ul>
Online Resources	<ul style="list-style-type: none"> <li>Microsoft Teams</li> <li>Teach-ICT</li> <li>SAM Learning</li> </ul>		<ul style="list-style-type: none"> <li>Seneca</li> <li>BBC Bitesize</li> <li>idea.org.uk</li> </ul>		<ul style="list-style-type: none"> <li>Code.org</li> <li>Cyber Discovery</li> <li>Craig n Dave</li> </ul>	