

# ICT Curriculum Map

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
<b>Year 7</b>	Opportunities to develop ICT skills are developed through other areas of the Year7 curriculum	Opportunities to develop ICT skills are developed through other areas of the Year7 curriculum	Opportunities to develop ICT skills are developed through other areas of the Year7 curriculum	Opportunities to develop ICT skills are developed through other areas of the Year7 curriculum	Opportunities to develop ICT skills are developed through other areas of the Year7 curriculum	Opportunities to develop ICT skills are developed through other areas of the Year7 curriculum
<b>Year 8</b>	<b>Networks</b> <b>Interacting with ICT for a given purpose</b> What is a network? Topologies Networking hardware and Software Wired and wireless networks Identifying if a network is working correctly Internet, internet services and the world wide web Threats to data Assessment	<b>E-Safety: digital citizenship</b> <b>ICT based communications</b> Fake news and how to identify it, biased writing, echo chambers and filter bubbles Cyberbullying Purpose of emotional manipulation Divisions in society and how these are created Hate speech Keeping safe when using sites Positive use of the internet Assessment	<b>Cryptography</b> History of Cryptography- Caesar cypher Solving computational problems Symmetric & Asymmetric-key cryptography Assessment	<b>Microsoft Applications</b> Word-page layout, formatting, wrapping text and inserting images Excel -inputting data into a spreadsheet, creating formulae, formatting, using functions in a spreadsheet, sorting & filtering Creating graphs in a spreadsheet Absolute and relative cell references Create a spreadsheet Assessment	<b>Coding Microbits, input &amp; output devices, meeting needs &amp; solving problems</b> 0 & 1 representation Programming & hardware interaction Flow diagrams Creating and programming Experimenting with LED's, motors, LDR's and capacitors Switching, conditional formatting, sound & animation Assessment	<b>Databases &amp; related terminology</b> Creating & using databases Creating queries to find specific data Selecting, sorting & filtering data for a specific task Logical reasoning Relational databases Assessment
<b>Year 9</b>	<b>Microsoft Excel</b> Using functions & formula's Inputting data & creating a basic formulae Formatting spreadsheets Sorting & filtering Producing graphs in a spreadsheet Absolute and relative cell references Modelling data Creating a spreadsheet Assessment	<b>Microsoft applications - PowerPoint, Word &amp; Outlook</b> Creating a presentation using the 'design' and 'new slide' functions Insert images, text boxes & shapes Protecting documents Emailing (Entry Level exam)	<b>Flowcharts, Microbits, &amp; coding</b> using Code.org courses Creating and programming Programming MOVE mini mk2 buggykit Using programmes to meet needs & solve problems (Entry Level exam)	<b>Binary, Hex &amp; Calculations</b> Processing numbers Revision of binary, logic and truth tables Consolidation of Skills & Preparation for Entry 1, Level 1 and 2 Assessments	<b>Databases - revision</b> ICT FS Entry Level exam (delivered in lessons) Binary+ calculations 1 Assessments	<b>Cryptography &amp; computational thinking</b> Understanding & creating a flow chart to pre program Create a cyphering program Spotting patterns of repetitions Assessments
<b>Year 10</b>	<b>Baseline Assessment</b> <b>Using ICT to plan &amp; organise work</b> Using of the internet Conducting research The difference between a search engine and a website Understand copyright Using Excel to enter, develop & refine information Creating a chart to fulfill a purpose	<b>Microsoft Word, Powerpoint and Excel</b> Selecting and using the software applications to meet needs and solve problems Applying a range of formatting and layout techniques to meet needs & purposes Intergating information Using ICT tools to check accuracy Evaluation of use of ICT tools for a specific task	<b>Outlook</b> Creating & sending emails using appropriate language and formats Attaching files Managing & storing information Printing	<b>Consolidation of skills</b> <b>Practice activities and tests</b>	<b>Consolidation of skills</b> Level 1 Examination	<b>Introduction to Digital Functional Skills</b> Uses of a device making a phone or video call, or sending emails while away from a desk Understand applications refers to those for desktop, laptop and mobile devices Understand what applying system settings means Know what navigating online content refers to Know internet searches refers to a specific and clearly defined piece of information or content that might be required in a work or real-life context
<b>Y11</b>	<b>Internet &amp; internet research</b> <b>Excel Level 1 &amp; 2</b> Conducting research using the internet Search techniques to locate and select information Copyright & constraints on the use of information	<b>Excel Level 2</b> <b>Microsoft applications</b> Using field names and data types to organise information Processing & analysing data to draw conclusions Applying image formatting techniques Using IF and V-Lookup	<b>Outlook</b> Creating & sending emails using appropriate language and formats Attaching files Using collaborative tools Managing & storing information to enable efficient information retrieval Printing	<b>Consolidation &amp; extension of skills</b> Coding using Java script/Python	<b>Digital Functional Skills</b> Gather data about energy use around you using the BBC micro:bit as a simple data logger Process and analyse the data to make informed decisions about reducing energy usage Undertake two longer, advanced projects to explore how wireless networks, smart materials and algorithms can help keep our oceans clean Design challenges for finding solutions to the Global Goals for sustainable development (SDGs)	<b>Digital Functional Skills</b> Learn how to display an image on the micro:bit's LED screen Learn how to run code when the micro:bit screen is facing down and vertically orientated Learn how to run code when the micro:bit screen is facing up and vertically orientated