

Curriculum Overview 25/26

Year	Autumn 1 (8 weeks)	Autumn 2 (7 weeks)	Spring 1 (7 weeks)	Spring 2 (6 weeks)	Summer 1 (4 weeks)	Summer 2 (7 weeks)
KS1 Building Blocks	<p>Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. Create and debug simple programs. Use logical reasoning to predict the behaviour of simple programs. Use technology purposefully to create, organise, store, manipulate and retrieve digital content. Recognise common uses of information technology beyond school. Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.</p>					
Yr 5	E-Safety	Moving Image (The Basics)	Scratch Block Based Programming (The basics)	Computer Systems: Hardware & Software	Stop Motion Animation The basics	
	<p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Select, use and</p>	<p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p> <p>Select, use and combine a variety of software (including internet services) on a range of</p>	<p>Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts.</p> <p>Use sequence, selection, and repetition in programs; work with</p>	<p>Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration.</p> <p>Use technology safely, respectfully and responsibly; recognise</p>	<p>Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content. Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p> <p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour;</p>	

	combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.	variables and various forms of input and output. Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.	acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	identify a range of ways to report concerns about content and contact.
Yr 6	E-Safety	Moving Image (Creating meaning)	Scratch Block Based Programming (Iteration & Selection)	Layers of Computer Systems (AI)	Podcasts Understanding Planning and Sound
	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report	Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them	Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and	Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and

	<p>concerns about content and contact.</p> <p>Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p>	<p>Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information.</p>	<p>into smaller parts.</p> <p>Use sequence, selection, and repetition in programs; work with variables and various forms of input and output.</p> <p>Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs.</p>	<p>collaboration.</p> <p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	<p>presenting data and information.</p> <p>Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.</p>	
Yr 7	E-Safety	Sorting & Searching	Representing Data in a Computer (Binary & Logic)	Computer Systems: Hardware & Software	Communication & Networking	Python using Chatbot
	<p>Understand a range of ways to use technology safely, respectfully,</p>	<p>Understand several key algorithms that reflect computational thinking [for example, ones for</p>	<p>Understand how numbers can be represented in binary, and be able to carry out</p>	<p>Understand how instructions are stored and executed within a computer system.</p> <p>Understand the hardware and software</p>		<p>Use 2 or more programming languages, at least one of which is textual, to solve a</p>

	<i>responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns.</i>	<i>sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem.</i>	<i>simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal].</i>	<i>components that make up computer systems, and how they communicate with one another and with other systems.</i>	<i>variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions.</i>
Yr 8	Cyber Security Knowledge	Cyber Security-Web Development	Foundation Python Programming	App Lab (Block based programming)	
	<i>Extending the National Curriculum with the inclusion of critical cyber security content.</i>	<i>Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users.</i>	<i>Use 2 or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions.</i>	<i>Use 2 or more programming languages design and develop modular programs that use procedures or functions.</i>	

Yr 9	What is a Visual Identity? - design style, elements	Repurposing Assets	Python Programming Sequence/Selection	Python Programming Pseudocode/Translation	Moving Image	Digital Sounds
	<p><i>Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users create, reuse, revise and repurpose digital artefacts for a given audience, with attention to trustworthiness, design and usability.</i></p>		<p><i>Use 2 or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions.</i></p> <p><i>Understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem</i></p>		<p><i>Undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users.</i></p>	
Yr 10 iMedia	R094 - Visual identity and digital graphics. Teaching	R094 - Visual identity and digital graphics. Teaching	R094 - Visual identity and digital graphics. Assessment Period	R094 - Visual identity and digital graphics. Assessment Period	R093 - Exam preparation. Teaching	R097 - Interactive digital media. Teaching
				Contingency Period	URS completion and Submission of R094	Assignment Released

Yr 10 Comp Sci	Paper 2 - Boolean Logic, Algorithms, Computational Thinking. Paper 1 - System Architecture.	Paper 2 - Algorithms, Computational Thinking. Paper 1 - Data Storage, Sound, Compression.	Paper 2 -Programming fundamentals, Data Types. Paper 1 - Architecture of the CPU.	Paper 2 - Additional Programming techniques. Paper 1 - Secondary Storage, Networks and Topologies.	Paper 2 -Programming fundamentals, Data Types, Additional Programming techniques. Paper 1 - Embedded Systems, Primary & Secondary Storage.	Paper 1 - Networks and Topologies, Wired and wireless networks, protocols and layers.
	Practical Programming	Practical Programming	Practical Programming	Practical Programming	Practical Programming	Practical Programming & Year 10 Mock Exam Prep
Yr 11 iMedia	R097 - Interactive digital media	R097 - Interactive digital media	R097 - Interactive digital media	R093 - Exam preparation Teaching	R093 - Exam preparation Teaching	R093 - Exam preparation
	Teaching	Teaching	Completion of Coursework	Contingency Period	URS completion and Submission of R094	
Yr 11 Comp Sci	Paper 1 - Threats to computer systems,	Paper 1 - Utility software.	Paper 2 - Searching and sorting algorithms.	Mocks Theory Revision Practical Programming Skills Revision.	Theory Revision Practical Programming Skills Revision.	Theory Revision Practical Programming Skills Revision.

	vulnerabilities, operating systems. Paper 2 – Defensive Design.	Ethical, legal, cultural and environmental impact. Paper 2 – Languages The Integrated Development Environment (IDE).	Practical Programming Skills Revision.			
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