Year group	Computing Systems & Networks (Computer Science + Digital Literacy)	Creating Media (Information Technology)	Programming (Computer Science)	Data & Information (Information Technology)	Online Safety (Digital Literacy) – Embedded throughout the curriculum
EYFS	Begin to recognise technology in the world around them. Understand simple uses of technology (cameras, tablets, interactive boards). Develop basic mouse/touch interaction.	Explore digital painting tools. Use digital photography with adult support.	Understand simple sequencing through unplugged activities. Use programmable toys with adult support.	Begin recognising simple patterns and groupings. Explore sorting and ordering.	Recognise that digital devices should be used with adult supervision. Understand safe vs. unsafe feelings online. Follow simple adult rules Tell a grown-up if something confusing or upsetting appears online. Avoid sharing their name, address, or photos without an
Year 1	Technology Around Us Identify devices as computers. Understand basic parts of a computer. Begin to log in and interact with simple software.	Digital Painting Use simple tools to create digital artwork. Experiment with line, shape, and colour on screen.	Programming A (Bee Bots) Give simple, sequenced instructions. Predict outcomes of instructions. Programming B Begin using block-based coding on screen. Understand action—reaction in code.	Grouping Data Organise objects into simple groups. Understand the concept of data.	Follow simple rules for using technology safely. Understand that devices can connect to the internet. Recognise kind and unkind online behaviour. Know who trusted adults are and ask for help when needed. Keep personal information private. Begin to question surprising or unrealistic online content.

Year 2	IT Around Us Understand how technology is used at home/school. Recognise uses of ICT in the wider world. Develop responsible use of	Digital Photography Take and edit photographs (framing, cropping). Create simple compositions using digital tools.	Programming A Use repeating patterns (loops) in simple programs. Debug mistakes with support. Programming B Use simple conditionals (if	Pictograms Use software to build pictograms. Interpret simple data sets.	Understand why online rules exist and follow them independently. Recognise risks such as clicking unknown links. Understand how online
	technology.		statements) in age-appropriate tools. Create multi-step algorithms.		behaviour can affect others. Close a tab or tell an adult if something goes wrong. Know what information is safe
					and unsafe to share online. Identify when online content might be made up or misleading.
Year 3	Networks & Communication Understand computers are connected in networks.	Stop Frame Animation Capture and sequence digital images.	Programming A Build sequences, repetition, and simple selection.	Branching Databases Classify objects using yes/no questions.	Use passwords safely and understand why they are important.
	Recognise the difference between the internet and the World Wide Web.	Plan and create animated stories.	Connect outputs to events (e.g., key press).	Create simple branching databases.	Recognise the concept of a digital footprint.
	Begin to understand how information travels.		Programming B Use more complex selection and control.		Know how to report inappropriate content on familiar platforms.
			Create branching programs.		Understand that others can use their personal information online.
					Identify simple clues that online content may be unreliable.
Year 4	The Internet Understand the structure of the internet.	Audio Production Record and edit audio.	Programming A Refine sequences with variables and loops.	Data Logging Use sensors to gather data. Interpret data over time.	Use websites and online communities safely.

	Know how search engines work. Evaluate reliability of online content.	Mix tracks and add sound effects.	Understand logical reasoning to explain programs. Programming B Apply repetition and selection to build interactive projects.		Apply polite and respectful communication online. Use reporting or blocking features with support. Create strong passwords and keep login details secure. Check more than one source when deciding if information is trustworthy.
Year 5	Searching Refine web searches using key terms. Understand how results are ranked. Use online content responsibly (copyright awareness).	Vector Graphics Create scalable digital drawings. Use layers, shapes, and grouping.	Micro:bit Selection Program using variables, sensors, and selection. Develop physical computing skills. Programming B Create more sophisticated multi-event programs. Test, debug, and refine.	3D Modelling (Data-Driven Design) Manipulate 3D objects using digital tools. Understand that models represent real data.	Understand risks linked to online communication and social platforms. Recognise spam, scams, and misleading messages. Communicate responsibly and understand the consequences of online behaviour. Confidently report concerns and use screenshots as evidence. Use privacy settings to control who sees information. Evaluate online sources for reliability, bias, and purpose.
Year 6	Communication and Collaboration Use online collaborative tools confidently. Understand data transfer and digital communication systems.	Web Page Creation Create content for a web page. Use layout, hyperlinks, and media elements effectively.	Programming A Use complex sequences, variables, inputs, and outputs. Build fully functioning, multipage/interacting programs. Programming B	Spreadsheets Use spreadsheets to calculate and present data. Use formulae, functions, and data visualisation.	Understand complex online risks such as phishing, fake accounts, and grooming. Make careful decisions about online interactions. Take responsibility for building a positive digital footprint.

Apply advanced digital citizenship skills.	Plan, create, and evaluate complex programs with structured algorithms.	Understand legal and ethical issues such as copyright and harassment.
		Use advanced reporting tools and know external support routes.
		Consider long-term consequences before sharing information online.
		Critically evaluate information, including misinformation and manipulated content.