

## Long Term Planning – Computers Science / IT

Year	Term 1A	Term 1B	Term 2A	Term 2B	Term 3A	Term 3B
Year 7	Cyber Safety, Online behaviour and expectations	Microsoft / Google Suites – Word, Excel, PowerPoint	Programming Concepts, Scratch, Design Cycle	Media, images, video, photography	Digital Presentations, PowerPoint, Videos, Drawing application	Typing, Introduction, Finger use
	Acceptable use policy, online persona, sharing personal details	Bold, Italic, underline, borders, fonts, layout and design	Hour of Code, Scratch codes, purpose and refining	Photographs and video hardware, purpose, safety, file types	Using the skills to combine into final presentations / cross curricular impact	Layout, accuracy, purpose and speed
Year 8	Cyber Safety, Online behaviour and expectations	Microsoft / Google Suites – Word, Excel, PowerPoint	Programming Concepts, Scratch, Python, Turtle, Design Cycle	Media, images, video, photography, Digital Presentations	Making Games, Scratch, Python	Typing, Speed, Accuracy
	Ethics, Cyber bullying, online persona	Formula, Graphing, Multimedia presentations	Transition from block coding to text based, GUI, AI concepts	Multimedia presentations / cross curricular impact	Skill development, programming concepts and problem solving	Layout, accuracy, purpose and speed
Year 9	Cyber Safety, Online behaviour and expectations	Microsoft / Google Suites – Word, Excel, PowerPoint	Programming Concepts, Python, Tkinter, Design Cycle	Digital Presentations, Media, images, video, photography	Gaming – 3D modelling, Blender, Introduction to Unity	Typing for purpose, Literacy
	Hacking, Different hats and moral positions	Presentations, Applied Word Processing	Problem solving, Computational thinking, Pseudocode	Social Media, Marketing	Advanced game design and program implementation for purpose	Building texts, layout for purpose, extended documents, structure

**Additional Notes:** Google Interland, Incredibox, Scratch, Brackets, Python IDLE, Human Resource Machine 1 & 2, Flow.ly, Micro:Bit classroom, Raspberry Pi Online, Flowol, Blender



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Year 10	Computer Architecture, Languages and Operating Systems	Hardware, Input and Output devices, Memory, storage and Media	Programming Concepts, Pseudocode and Flowcharts	Data representation, Logic Gates, Cases, Code construction	Sensors – Raspberry Pi BBC- Microbit, Circuits	Ethics, Security and Hacking			
	Von Neumann, fetch- execute cycle, interrupts, High and low-level languages	2D and 3D scanners, interactive boards, QR codes, sound	Python, Problem solving, Errors, Computational Thinking, Solutions	Data types, Boolean, integer, float, string, code construction / format, layout	Hands on computing, building, repairing, creating circuits, Linux operating	Hack the classroom, cameras, lights, music, Different Hats			
Year 11	Algorithm design and Problem Solving	Communication and Internet technologies, Bitcoin, AI, Web Design	Programming Concepts, Pseudocode and Flowcharts	Data representation, Databases, SQL	Databases				
	Flowcharts, Pseudocode (IGCSE format), Functions, Arrays, Computation	Serial, parallel, simplex, duplex, error checking, detection	Soling extended problems, past papers, problem solving under pressure	SQL, tables, query, Normal Form, redundancy, data types					
Extras									
Additional Notes:									

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