KS3 COMPUTER SCIENCE/ FUNCTIONAL SKILLS ICT CURRICULUM MAP

YEAR	Autumn		Spring		Summer	
Year 7	Impact of technology. • online security • Respectful communication • cyberbullying	Support for a cause. • Researching • PowerPoint presentation on promoting your cause.	Networks • Internet • World wide web	Spreadsheets • Conditional formatting • Collecting data	Programming essentials in scratch. • Variables • Selection • iteration	Programming 2 • Decomposing • Solving problems
Year 8	Design vector graphics Combining multiple tools and techniques to create vector graphic design.	Computing systems • Computer hardware • System architecture • Operating systems	Website building blocks • HTML tags • CSS • Hyperlinks	Presentation • Coding • Binary digits • Conversion between units.	Mobile app development • Programming • Decomposition • Variables • Presentation	Intro to python • Algorithm • Boolean variables
Year 9	Animations • Using blender to add/delete/move objects. • Making a stop-frame animation.	Data science • Identifying data • Solving problems • Analysing data • Make recommendations	Cybersecurity • Data protections act • Computer misuse act • Security threats	Representations going audio visual • Digital images • Binary representations of images and sounds	Python programming • Creating lists • Selection • Iteration • Operations • Mini-project	Physical computing • Micro bit
Year 11 ICT functional Skills	Making the most of your computer • Customise desktop • Adjusting tools • Resolving problems	Managing information • Folder structures • Storing information	Finding and selecting information • Construct efficient searches • Acknowledging sources	Working with structured data • Record handling • Analysing records	Working with numbers and charts • Produce charts and graphs • Format data	Working with texts and images/combining and presenting information. • Work with tables • Editing images • Creating layouts

GCSE COMPUTER SCIENCE/ FUNCTIONAL SKILLS ICT CURRICULUM MAP

						• Plan a publication
Year 10 GCSE Computer Science	System architecture • CPU • Registers • Embedded systems 1.2 Memory • ROM & RAM	Storage • Types • Devices • Characteristics • Calculations	Networks • WANS & LANS • Topologies • Protocols • layers • Hardware • Ethernet	System security • Forms of attacks • Threats posed	Operating systems • OS • Utility software	Impacts on society • Key stakeholders • Open source vs proprietary software • Legislation
	• Virtual memory • Flash memory		• Packet switching	• Identifying, preventing vulnerabilities • OS • Utility software		
Year 11 GCSE Computer Science	Algorithms • Abstraction • Decomposition • Pseudocode • Sorting	Variables • Operators • Sequences • Data types • Sub-programs	Defensive design • Testing	Boolean logic • Binary form • Logic diagrams • Truth tables	Programming languages • Low- and high-level languages • Translators • Compilers • Interpreters • IDE	