

KS3 IT & Computing Curriculum 2024-25

YEAR 7	YEAR 8	YEAR 9
General IT Procedures ESAFETY E-Safety Introduction Social media Cyberbullying, Trolling & Advice Creating Strong Passwords	ESAFETY Social media, Sharing Information Online Digital Footprint Identity Theft Keeping Data Safe Screen Time Awareness	E-SAFETY Social Engineering Malware Hacking, & DOS Attack Sharing Information Online Mitigation of risk
COMPUTATIONAL THINKING & DATA REP Decomposition, Abstraction, Algorithms What is Binary Binary & Denary conversions What is Boolean logic Boolean Logic AND, OR & NOT	PROGRAMMING PYHON Print function & basic debugging Variables and Input Statements Concatenation Data Types & Boolean Expression Basic IF Statements	PROGRAMMING PYHON Casting, IF Statements ELSE/ELIF Boolean Operators Iteration - FOR & WHILE Loop
BLOCK BASE PROGRAMMING Using Computational Thinking Online Micro bit simulator Programming Microbits Programming Robo: Bit Iteration – Real Life examples	SPREADSHEETS Spreadsheets uses & Arithmetic formulas MIN, MAX, AVERAGE functions Graphical Representation Conditional Formatting & operators Count IF Function	SPREADSHEETS Concatenation VLOOKUP, IF Function Data Validation Absolute Cell Referencing Formatting Datatypes
PROGRAMMING TEXTBASE Introducing the Turtle Graphics Window Text Window Iteration Using Variables	DATA REP Binary Addition What is Hex Binary to Hex, Hex to Binary Basic Logic circuit – AND, OR, NOT	SYSTEMS ARCHITECTURE The CPU & FDE Cycle Inside the Hood - PC dismantling CPU Performance RAM & ROM Storage Devices
SPREADSHEETS Basic +/-* Arithmetic SUM function Spreadsheet Formatting Graphical Representation	PROGRAMMING & Lab:BITS Design Tools - Flowchart/Mindmap Using Sensors & Sound Programming Lab:Bits Control Systems	SORTS, SEARCHES & DATA REP Sorting Data Insertion, Bubble & Merge sort Linear & Binary search Storing images & sound Logic Circuits & Truth Table
App Design Prototype Client Brief & Target Audience App Design & considerations	SYSTEMS ARCHITECTURE Hardware & Software Input & Output devices	Ethics & Legislation DPA, CMA, Copyright Health & Safety Internet of Things

KEY: Digital Literacy, Information Technology, Computer Science

