STEWARDS ACADEMY

ICT and Computing Curriculum Map – Years 7–11

Half-term	Year 7	Year 8	Year 9	Year 10	Year 11
Autumn 1	**7.1 Introduction to ICT** **Pupils learn to log in and use school computer systems, develop basic digital literacy and practise using presentation software.**	**8.1 Computer Systems** **Pupils explore the main components of a computer and develop their understanding of how computer systems work.**	**9.1 Cybersecurity** **Pupils explore cyber threats, ways to protect data and the importance of keeping systems and information secure.**	Data Representation Logic Gates Units Binary/ Denary/ Hex Character sets Sound and images Compression, RLE Huffman Code	Revision Logic Gates Units Binary/ Denary/ Hex Character sets Sound and images Compression, RLE Huffman
Autumn 2	**7.2 Digital Citizenship** **Pupils learn about e-safety, responsible technology use, online behaviour and how to respond to risks online.**	**8.2 Logo Design** **Pupils explore branding and visual communication, developing a logo for a specific purpose or audience.**	**9.2 Online Dangers** **Pupils investigate online risks and develop strategies for using digital technology safely and responsibly.**	Chapter 5 CPU and system performance Secondary storage Software	Revision Programming concepts Pseudocode Arrays Trace Tables
Spring 1	**7.3 Modelling with Spreadsheets** **Pupils organise and model data using spreadsheets, including basic formulae and functions.**	**8.3 HTML and Website Creation** **Pupils learn how websites are structured and create webpages using HTML tags and introductory CSS.**	**9.3 Theme Park Project** **Pupils apply business and creative skills to develop a theme park concept, considering customer needs, products and services, branding and promotion.**	Programming Understanding trace tables. Programming terms Nested iteration Definite/ indefinite iteration Arrays Writing to and reading from files	Revision for exam Pupils will be looking at exam questions
Spring 2	**7.4 Scratch** **Pupils use block-based programming to create projects and develop sequencing, logic and problem-solving skills.**	**8.4 Databases** **Pupils learn how databases store, organise and retrieve information, developing practical data-management skills.**	**9.4 Computational Thinking** **Pupils develop decomposition, pattern recognition, abstraction and algorithmic thinking to plan solutions to problems.**	Python - Sub routines Pupils will need a good understanding of how code works. MOD DIV Validation	Revision for exam Pupils will be looking at exam questions
Summer 1	**7.5 Coding in Kodu** **Pupils create interactive games and worlds, applying logical thinking and problem-solving through block-based coding.**	**8.5 Python Programming** **Pupils extend their text-based programming skills and practise core Python concepts.**	**9.5 Further Python Programming** **Pupils consolidate and extend their Python knowledge, applying programming constructs to increasingly challenging problems.**	Networks Wired and wireless Network topologies Network protocols Cyber security threats	Revision for exam Pupils will be looking at exam questions
Summer 2	**7.6 Programming in Python** **Pupils make the transition to text-based coding and develop confidence with basic Python commands and program structure.**	**8.6 Creating Shapes Using Python Turtle** **Pupils use Python Turtle to create shapes and patterns, applying sequence, iteration and precision in coding.**	**Applying and consolidating learning** **Pupils revisit and apply programming, computational thinking and project skills to prepare for progression to Key Stage 4.**	Ethical, environmental and legal issues surrounding digital technology	N/A