

COMPUTING - Curriculum Overview

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
7	Constructs of Computer Programming (CS) Sequence / Iteration / Selection variables	Hardware & Software (IT/DL) E-Safety Computer Systems Networks	Physical Computing (CS) Micro-bits Sensors Make-code	Spreadsheets Formulae Functions Multiple-sheets Navigation	Computer Programming [Python: Turtle] (CS) Turtle module	Digital Media (IT/DL) Graphic file formats/pixels/links to binary/storage
8	Number in Computing (CS) Binary/Hexadecimal/ Denary Binary Calculations	Computer Programming [Python: Text Mode] (CS) Variables / Data Types / Conditional Statements / Calculations / Random Module	Networks and the Internet (IT) E-Safety Protocols / WWW / Internet Cyber Crime	Web Development HTML CSS Javascript	Cyber-Security (CS/IT/DL) Cryptography Mono & Poly-alphabetic ciphers Steganography	Data Representation (CS) ASCII Graphics Sounds File-size
9	Digital Footprint and the Law (CS/IT/DL) e-safety legislation	Computer Programming [Python: Text Mode] (CS) File handling	Artificial Intelligence / Machine Learning (IT/CS) Mechanics / Ethics	Data Manipulation using Spreadsheets (IT/DL)	Augmented Reality (IT/DL) Digital assets User interactions	App Development (CS) code.org [javascript] Elements Screens

		Data structures Subroutines Error handling				Naming Conventions
GCSE Computer Science						
10	Unit 7: Programming	Unit 6: Algorithms	Unit 1: Systems Architecture, Memory and Storage	Unit 2: Data Representation	Unit 3: Computer Networks, Connections and Protocols	Unit 4: Network Security and Systems Software
11	Unit 8: Logic and Languages	Unit 5: Ethical, Cultural and Environmental Impacts of Digital Technology	Paper 2 – Computational Thinking, Algorithms and Programming (revisited)	Paper 1 – Computer Systems (revisited)	Final Examination Preparation	
OCR National IT Level 2						
10	R060: Data Manipulation using Spreadsheets			R050: IT in the Digital World / R070: Using Augmented Reality to Present Information		
11	R070: Using Augmented Reality to Present Information			R050: IT in the Digital World		

