Computer Science: All-Through Curriculum

Year	T1	T2	T3	T4	T5	T6
EYFS	*Free access to computer and ipad Beebots*					
1	Computing systems and networks Technology Around Us	Creating media Digital painting	Creating media Digital writing	Data and information Grouping and labelling objects	Programming 1 Moving a robot	Programming 2 An Introduction to animation
2	Computing systems and networks Technology Around Us	Creating media Digital photography	Creating media Making Music	Data and information Pictograms	Programming A Robot Algorithms	Programming B An Introduction to Quizzes
3	Cybersafe Using a computer safely	Scratch Stories Programming	Robo Challenge Programming and robotics	Scottie Go! Programming	Rainforest Digital skills - presentation	Africa Quiz Digital skills - presentation
4	Nifty Networks How a network works	Inventors Digital skills – presentation, internet search	Rotten Roman Computing – algorithms and data representation	Caesar Cipher programming	Just Dance with the Algorithm Algorithms and programming	Scottie Go! Programming
5	Anglo Saxon Gaming Programming, digital skills - presentation	Magical Mandalas Programming	Multimedia Mummies Digital skills, programming, and multimedia	Mummified machines Inside a computer, how a computer works, digital skills – word processing	Tudor Maze Programming, digital skills, testing and evaluation	Scottie Go! Programming, loops
6	Switched on Sound Data representation – sound, digital skills - presentation	Cryptography and ciphers Programming, algorithms, problem solving	Evacuee Blog (webdesign) Web design, design skills, planning, testing and evaluation	Scottie Go! Programming, variables and selection	Esports tournament Careers, database, spreadsheet, communicating online, evaluation	Loopy games Careers, design, planning a game, programming, digital skills, combining software
7	E-Safety and introduction to the school network	Understanding binary	Algorithms	An introduction Programming in python	Software skills and introduction to excel	

8	Web design in HTML	3D animations in Blender	Using inkscape to create 3d Animations	Creating a game in Python	Software skills	
9	Binary recapped using Logic gates	Stranger things – programming using BBC microbits	Lights, Camera, Action – an introduction to creative iMedia	E-Safety and Cyber security	Data Science	
10 CS	Introduction 1.1 Systems Architecture 1.2 Memory and Storage 2,2 Programming fundamentals	1.2 Memory and storage 2.2 Programming fundamentals	2.1 Algorithms 1.3 Computer networks, connections and protocols	2.1 Algorithms 2.4 Boolean logic 2.5 Programming languages and Integrated Development Environments	2.1 Algorithms 2.2 Programming fundamentals 2.3 Producing robust programs	Recap
10 CIM	Introduction to Creative iMedia	R093 theory and preparation	R094 Coursework theory	R094 Coursework	R094 Coursework	R095 Coursework preparation
11 CS	1.3 Computer networks, connections and protocols 1.4 Network security 1.5 Systems software	1.6 Ethical, legal, cultural and environmental impacts of digital technology	2.1 Algorithms 2.2 Programming fundamentals 2.3 Producing robust programs	2.4 Boolean logic 2.5 Programming languages and Integrated Development Environments	RECAP	RECAP
11 CIM	R095 Coursework	R095 Coursework	R093 theory	R093 Exam preparation	R093 Exam preparation	
12	1.1.1 Structure and function of the processor 1.1.2 Types of processor 1.4.1 Data Types 1.4.2 Data Structures	1.1.3 Input, output and storage 1.2.1 Systems Software 1.4.3 Boolean Algebra 2.1 Elements of computational thinking	1.2.2 Applications Generation 1.2.3 Software Development 1.2.4 Types of Programming Language 2.2.1 Programming techniques 2.2.2 Computational methods	1.3.1 Compression, Encryption and Hashing 1.3.2 Databases 1.3.3 Networks 2.3.1 Algorithms	1.3.4 Web Technologies 1.5.1 Computing related legislation	1.5.2 Moral and ethical Issues Introduction to NEA
13	NEA prep Recap 1.1 Recap 1.2	NEA Prep Recap 1.3 Recap 1.4	NEA prep Recap 1.5	NEA Prep Revision component 1	NEA Prep Revision Component 2	