W/B		Programming (DDS)	Theory (DDS)	Theory (LJM)
		Unit1	Unit 2	Units 1 & 2
06/09/2021	Sep	Programming Initial Screening	3.5.1 Number systems, 3.5.2 Number bases, 3.5.3 Units of information	3.6.4.1 Logic gates
13/09/2021		Introduction to programming,Data Types, Operators,Sequence	3.5.4.1 Unsigned binary arithmetic (inc. multiply)	3.6.5 Boolean algebra
20/09/2021		Selection	3.5.4.3 Signed binary using two's complement 3.5.4.4 Numbers with a fractional part	Circuits --> Algebra
27/09/2021		Iteration	*3.5.5.2 ASCII and Unicode (theory) 3.5.5.3 Error checking and correction Barcode Reader HWDotW*	Identities / simplifications using truth tables, Basics of problem solving, BEBRAS CHALLENGE
04/10/2021	Oct	Maths and String Functions	Topic consolidation	identities / simplification using algebra
11/10/2021		Interesting Maths Problems	Benchmark	Benchmark Go through
25/10/2021		Half Term		
01/11/2021		Data Structures (Arrays)	3.5.6.4 Bitmapped graphics & Vector Graphics, Digital Camera HWDotW	3.7.1.1 Internal hardware components of a computer, 3.7.2.1 The meaning of the stored program concept
08/11/2021	Nov	Validation techniques	3.5.6.5 Digital representation of sound, DAC	3.7.3.1 The processor and its components 3.7.3.6 Factors affecting processor performance
15/11/2021		Functions and procedures	3.5.6.7 Data compression, Lossy, Lossless	3.7.3.2 The Fetch-Execute cycle and the role of registers, 3.7.3.3 The processor instruction set, 3.7.3.4 Addressing modes
22/11/2021		Structured programming and Passing Parameters	3.5.6.8 Encryption,RFID HWDotW	3.7.3.5 Machine-code/assembly language operations
29/11/2021		Structured programming and Passing Parameters	3.8 Consequences of uses of computing (Social, Ethical, Moral, Legal)	Tracing Assembly Programs, Practical Assembly programming
06/12/2021	Dec	Introduction to XO programing pre-release	3.8 Consequences of uses of computing	Consolidation and practice
13/12/2021		XO Code development tasks	**Benchmark**	**Benchmark**
20/12/2021		Christmas		
27/12/2021				
03/01/2022	Jan		Laser Printer HWDotW	3.9.1.1 Communication methods
10/01/2022		**XO Code test**	3.6.1.1 Relationship between hardware and software	3.9.1.2 Communication basics
17/01/2022		Introduction to Cypher programming pre-release.	*College Network Tour*	3.9.2.1 Network topology: focus on the difference between logical and physical
24/01/2022		File Handling and structures	3.6.1.2 Classification of software, Optical Disk HWDotW	3.9.2.2 Types of networking between hosts
31/01/2022	Feb	Cypher code development tasks	Classification of software	3.9.2.3 Wireless networking
07/02/2022		Cypher code development tasks	**Benchmark**	3.3 Systematic approach to problem solving
14/02/2022		Half Term		
21/02/2022		**Cypher Code test**	3.6.1.3 System software ,3.6.1.4 Role of an operating system (OS), Hard Disk HWDotW	3.4 Theory of computation overview
28/02/2022	Mar	Introduction to ARG programming Pre-Release (?morse Code)	Linking Hardware and Software, Solid-state disk HWDotW	3.4.2 Finite state machines (FSMs)
07/03/2022		devlopment tasks	3.6.1.3 System software Not translators)	Programming with FSM
14/03/2022		Part C questions	Revision and consolidation	3.4 Theory of Computation review
21/03/2022		Timed programming problems techniques	Computational Thinking themes	**Benchmark**
28/03/2022		**Mini test and instant feedback**	Go through and 1-2-1s	
04/04/2022	Apr	Easter		
11/04/2022				
18/04/2022		Programming Skills Practice	Focus on Exam Technique	
25/04/2022		"Part B" Technique and practice	Practicing holistic questions.	Introduction to the NEA.
02/05/2022	May	"Part C" Technique and practice	Revision and focused group learning	Brainstorming ideas, looking at past projects
09/05/2022		Exam strategy	Revision	Introduction to database programming
16/05/2022		**ARG Programming Test**	**ARG Benchmark**	Database concepts
23/05/2022				
30/05/2022		Half Term	Half Term	
06/06/2022		Introduction to OOP	Event-Driven programing skills	Practical Database work (connections and DDL)
13/06/2022		OOP Skills (instantiation)	Form based Hangman	Practical Database work: linking with abstract data types and structures
20/06/2022		OOP Skills (Composition)	Form based Hangman	Practice DB project
27/06/2022		OOP Skills (inheritance)	Form based Hangman	Practice DB project, Introduction to "Research for analysis"

04/07/2022		OOP programming challenges		Create a Task list of skill development and research tasks
		Summer Hols		