Vision summary/ Curriculum intent: GCSE Computer Science

k	Unit	Year 9	Assessment	Homework	Unit	Year 10	Assessment	Homework
1	1	Learn to programe - Python			2	Unit 1.3 - L1 & 2		Watch video clips - Factors that affect network performance AND Client server & P2P networks - and make notes
2	1	Learn to programe - Python			3	Unit 1.3 - L 3 - 5		Watch video clips - Network hardware and The Internet - and make notes
3	1	Learn to programe - Python			2	Unit 1.3 - L 6 & 7		Watch video clips - Star & Mesh networks AND modes of connection - and make notes
4	1	Learn to programe - Python			3	Unit 1.3 - L 8 - 10		Watch video clips - Wireless encryption, IP and MAC addressing, Standards & protocols - and make notes
5	1	Learn to program - VB			2	Unit 1.3 - L11 & 12		Watch video clips - The concept of
6	1	Learn to program - VB			3	Unit 1.3 - end of topic assessment. Complete workbook. Unit 1.3 Action. Introduction to network practical	2 X short & meduim answer topic paper	
7	1	Learn to program - VB			2	Network practical		
8	1	Learn to program - VB			3	Network practical		
October								
9	1	Unit 1.1 - L1		Watch video clip on Von Nueman architecture and make notes	2	Unit 1.4 - L1 & 2		Watch video clips - Threats posed to networks - and make notes
10	1	Unit 1.1 - L2		Watch video clip on CPU characteristics and make notes	3	Unit 1.4 - L3 - 5		
11	1	Unit 1.1 - L3		Watch video clip on Embedded systems and make notes	2	Unit 1.4 - L6 & 7		
12	1	Unit 1.1 - L4		Revise for end of topic test	3	Unit 1.4 - L8 - 10		Watch video clips - Identifying vunrebilities - and make notes. Revise
13	1	Unit 1.1 - end of topic assessment. Complete workbook	Short and meduim answer topic paper		2	Unit 1.4 - end of topic assessment. Complete workbook. Action	Short and medium end of topic paper	
14	1	Unit 1.1 - Action		Watch video clip on need for primary memory, RAM & ROM and make notes.	3	Programminng challenge		Program Challenge booklet Tasks 1 - 5
15	1	Buffer - Programming Challenge			2	Programming challenge		Program Challenge booklet Tasks 6 - 11
Christmas								
16	1	Unit 1.2 - L1		Watch video clip on Virtual memory and make notes	3	Program Challenge		Program Challenge booklet Tasks 12 - 15
17	1	Unit 1.2 - L2		Watch video clip on need for secondary storage and common types of storage and make notes.	2	Program Challenge		Program Challenge booklet Tasks 16 - 21
18	1	Unit 1.2 - L3	Short and meduim answer topic paper		3	Program Challenge		Program Challenge booklet Tasks 22 - 28

Year 9 unit bands (vertical labels): Programming; System architeture; and Storage

Year 10 unit bands (vertical labels): Network connection and protocols; Network security; Programming

#		Topic	Unit	Topic paper	Watch video clip		Topic	Unit	End paper	Task
19	1	Memory	Unit 1.2 - L4		Watch video clip on sutable storage media and make notes	2	Progr	Program Challenge		Program Challenge booklet Tasks 28 - 34
20	1		Unit 1.2 - L5		Watch video clip on units of data storage and make notes	3		Program Challenge		Program Challenge booklet Tasks 35 - 37
21	1		Unit 1.2 - L6	Short and meduim answer topic paper	Watch video clip on data capacity and calculations and make notes	2		Program Challenge		Program Challenge booklet Tasks 38 - 40
February										
22	1	Memory and Storage	Unit 1.2 - L7		Watch video clip on converting and addition of binary and make notes	3	System software	Unit 1.5 L 1 - 3		Watch video clips - OS part 1 & 2 . Utility software - and make notes
23	1		Unit 1.2 - L8		Watch video clip on binary shift and hex and make notes	2		Unit 1.5 L4 + test	Short and medium end of topic paper	Revise for end of topic test
24	1		Unit 1.2 - L9			3		Unit 1.5 Action. Complete workbook. Unit 1.6 L1 & 2		Watch video clips -Privacy issues and Legislation-and make notes
25	1		Unit 1.2 - L10	Short answer topic paper	Watch video clip on representing character sets and make notes	2	E, L & C	Unit 1.6 - L3 & 4		Watch video clips -Cultral implications and environmental impact - and make notes
26	1		Unit 1.2 - L11		Watch video clip on representing images and make notes	3		Unit 1.6 - L5 - 7		Watch video clips -Wider impacts, open source V propritry S/W - and make notes. Revise
27	1		Unit 1.2 - L12		Watch video clip on representing sound and make notes	2		Unit 1.6 test + action	Short and medium end of topic paper	
Easter										
28	1	Memory and Storage	Unit 1.2 - L13		Watch video clip on compression and make notes	3	Mock	How to answer long answer questions. Practise	Long answer question	Revision
29	1		Unit 1.2 - L14			2		Revision - Computing systems		
30	1		Unit 1.2 - L15		Revise for end of topic test	3		Revision - Computing systems		
31	1		Unit 1.2 End of topic assessment. Complete Workbook	Short and medium answer topic paper		2		Revision - Computing systems	**Mock Paper 1 only**	
32	1		Unit 1,2 - Action plus complete workbook			3		Programming challenge		
Whitsun										
33	1	Programming	Program Challenge - Python/VB			2	Algorythms	Unit 2.1 - L1 & 2		Watch video clips - Decomposition
34	1		Program Challenge - Python/VB			3		Unit 2.1 - L3 - 5		Watch video clips - Input, process & output AND arithmetic thining - and make notes
35	1		Program Challenge - Python/VB			2		Unit 2.1 - L6 & 7		Watch video clips - Linear AND Binary search - and make notes
36	1		Program Challenge - Python/VB			3		Unit 2.1 - L8 - 10		Watch video clips - Bubble search AND Merge 7 Insertion sorts AND using algorythims - and make notes
37	1		Program Challenge - Python/VB			2		Unit 2.1 - L11 and Catch-up		
38						3				
39	1		Program Challenge - Python/VB			2		Programming challenge		

Year 11

Week	Unit	Year 11	Assessment	Homework
1	Algorthms	Unit 2.1 - L12 & 13		
2	Algorthms	Unit 2.1 - L 14 - 16		Watch video clips - Finding bugs and suggesting fixes AND trace tables - and make notes. Revise
3	Algorthms	Unit 2.1 - End of topic assessment. Compllete workbook. Unit 2.2 Action.	Short and medium answer topic paper	
4	Programming fundimentals	Unit 2.2 L 1 - 3		Watch video clips - Operators, boolen, data types AND string manipulation AND file handling opperations AND SQL - and make notes. Revise
5	Programming fundimentals	Unit 2.2 - L4 & 5		Watch video clips - Arrays AND sub programmes AND Random number generator - and make notes. Revise
6	Programming fundimentals	Unit 2.2 L 6 & 7. End of topic Assessment. Workbook completion.	Short and medium answer topic paper	Revise
7	Programming fundimentals	Unit 2.2 Action		Watch video clips - Defensive design considerations 1 - and make notes. Revise
8	Programming fundimentals	Unit 2.3 - L1 - 3		Watch video clips - Defensive design considerations 2 AND maintainability AND Algorythum refinement AND identifying syntax errors- and make notes. Revise
October				
9	Robust programming	unit 2.3 - 4 & 5		Watch video clips - Sutable test data AND revise - and make notes. Revise
10	Robust programming	Unit 2.3 - L6. End of topic Assesment. Complete workbook. Actions	Short and medium answer topic paper	Revises
11	Robust programming	Programing		
12	Boolen	Unit 2.4 - L1 - 3	Short and medium answer topic paper	Watch video clips - Combined boolean AND truth tables - and make notes. Revise
13	Programming	Programing		Exam paper 1.1
14	Programming	Programing		
15	Programming	Programing		Exam paper 1.2

Week	Unit	Year 11	Assessment	Homework
	Christmas			
16	Programming language and IDLEs	Unit 2.5 - L1- 3		Watch video clips - Translators, complilers and interipters AND IDE's - make notes. Revise
17	Programming language and IDLEs	Unit 2.5 - L4. End of topic assessment. Complete workbook.	Short and medium answer topic paper	Revises
18	Revision	Revision - Computer systems		Exam paper 2.1
19	Revision	Revision - Computer systems		
20	Revision	Revision - Computer systems		Exam paper 2.3
21	Revision	Revision - Computer systems		
February				
22	Revision	Revision - Computational thinking, algorythums and programming.		Exam paper 2.2
23	Revision	Revision - Computational thinking, algorythums and programming.	PA - short, medium and long answer questions	
24	Revision	Revision - Computational thinking, algorythums and programming.		Exam paper 2.3
25	Revision	Revision - Computer systems / Computational thinking, algorythums and programming.	PA - short, medium and long answer questions	
26	Revision	Revision - Computer systems / Computational thinking, algorythums and programming.		Past paper - Computer systems 1
27	Revision	Revision - Computer systems / Computational thinking, algorythums and programming.	PA - short, medium and long answer questions	Past paper - Computer systems 2
	Easter			

28	Revision and Exam	Revision - Computer systems / Computational thinking, algorythums and programming.	SA - short, medium and long answer questions	Past paper - CTA & P 1
29		Revision - Computer systems / Computational thinking, algorythums and programming.		Past paper - CTA & P 2
30		Revision - Computer systems / Computational thinking, algorythums and programming.	PA - short, medium and long answer questions	
31		Revision - Computer systems / Computational thinking, algorythums and programming.	Exam	