Curriculum Sequencing Overview - Computer Science Year 10 2023-24

Week	1	2	3	4	5	6	7	8
Unit Theme and Assessed Knowledge/ Skills	Course intro and the Central Processing Unit		Computer Memory		Computer Storage		Units of data	
Lesson Topics Sequence & Content	1. Into course. Hand out Useful resources. Folder set up. Intro to Python 2. 1.1.1 Architecture of the CPU T1 3. Architecture of the CPU T1 4. CPU performance T2	5. Programming in Python	6. CPU performance T2 7 **KA1 CPU Architecture & performance** Embedded systems 8. Primary storage (Memory) T3 9. Primary storage (Memory) T3	10. Programming in Python	11. Secondary storage T4 12. Secondary storage T4 13**. End of Unit test** - Systems architecture and Storage 1. Units	2. Programming in Python	3. units 4. Data storage 5. Data storage - characters 6. Data storage - characters	7. Programming in Python
Key Assessments			KA 1 CPU **Architecture & performance**		**End of topic1 assessment** Systems architecture and Storage			

Week	9	10	11	12	13	14	15	16
Unit Theme and Assessed Knowledge/ Skills	Storage images & sound		Network LANs and WANs		Client server networks		Network protocols and layers	
Lesson Topics Sequence & Content	8. **KA 3 data storage and characters 10 Qs**. Data storage- images 9. Data storage- images 10. Data storage- sound 11. Data storage- sound	12. Programming in Python	13. Compression 14. **Data Representation End of Topic 2 assessment** 1. Networks Internet and WANs 2. Networks LANS	3. Programming in Python	4. Networks Wireless networking 5. **KA 4 Networks LANs and WANs** Networks Client server & P2P 6. Networks Client server & P2P 7. Christmas PyGame coding	8. Programming in Python	9. Network Standards Protocols & Layers 10. Network Standards Protocols & Layers 11. Networks Connections & Protocols **End of Topic assessment** 1. Network threats	2. Programming in Python
Key Assessments	**KA 3 Data storage**		**End of topic 2 Data representation**		**KA 4 Network LANs and WANs**		**End of Topic assessment**	

Week	17	18	19	20	21	22	23	24
Unit Theme and Assessed Knowledge/ Skills	Operating systems and utility software		Programming fundamentals		Programming iteration		Programming Arrays	
Lesson Topics Sequence & Content	3. Preventing vulnerabilities 4. Operating Systems 6. Utility software 7. **KA 5 Network threats** Utility software	8. Programming in Python	9. Networks revision 10. Networks Security **End of Topic assessment** 1. Programming fundamentals 2. Programming fundamentals	3. Programming in Python	4. Sequence & selection 1 5. Sequence & selection 2 6. **KA 6 Sequence & selection** iteration worksheet 7. Iteration while loops	8. Iteration While loops	9. Iteration For loops 10. Iteration For loops 11. Arrays 12. **KA 7 For and while loops**	13. Arrays
Key Assessments	KA5 Network threats and prevention		Networks Security End of Topic assessment		KA 6 Sequence & selection		KA 7 For and while loops	

Week	25	26	27	28	29	30	31	32
Unit Theme and Assessed Knowledge/ Skills	Programming Functions and Procedures		Ethics and cultural issues			Interleaved learning of earlier topics		
Lesson Topics Sequence & Content	14. Procedures & Functions 1 15. Procedures & Functions 2 16. Records & Files 17. Records & Files	18. SQL	19. SQL 20. **End of Topic assessment** 1. Ethical & cultural issues 2.Environmental issues	3. Legislation & privacy 4. Exam practice on Ethical & Environmental 5. Closing the loop long answer questions 6. Ethical and environmental deeper thinking	7. **Ethical & Environmental End of unit test**	8. Interleaved CPU Architecture & performance 9. Interleaved Computer memory 10. Interleaved Computer Storage 11. Interleaved Binary conversion	12. Interleaved Images sound and compression	13. Interleaved LANs, WANs and Typologies 14. Interleaved Wireless networking and P2P networks 15. Network protocols & layers 16. Network threats and prevention
Key Assessments	KA 8 Functions & Procedures		End of Topic assessment		Ethical & Environmental End of unit test			

Week	33	34	35	36	37	38	39
Unit Theme and Assessed Knowledge/ Skills	Mock prep	Mock exams		Programming recap			*End of Term*
Lesson Topics Sequence & Content	17. Mock practice 1 18. Mock practice 2 19. Mock practice 3 20. Mock practice 4	Mock Exams Uninterrupted lessons will focus on revision.	Mock Exams Uninterrupted lessons will focus on revision.	1. Programming task recap basics	1. Practical programming 2. Practical programming 3. Practical programming 4. Practical programming	1. Programming escape room	*Extra-curricular activities*
Key Assessments	Revise all	Y10 Mock Exams – Full Paper 1					