## Computer Science Year 10 curriculum map



Year 10	T1	T2	Т3	T4	T5	Т6
Content / Topic for Term	<ul><li>1.1 Systems architecture</li><li>1.2 Memory and storage</li></ul>	1.3 Computers networks, connections and protocols	<ul> <li>1.4 Network security</li> <li>1.5 Systems <ul> <li>software</li> </ul> </li> <li>1.6 Ethical, legal, <ul> <li>cultural and</li> <li>environmental</li> <li>impacts of digital</li> <li>technology</li> </ul></li></ul>	Revision and recall PPE Week Programming skills update	20 hours programming project	20 hours programming project
Key Knowledge for acquisition, recall and application in assessment or exam	Architecture of the CPU CPU performance Embedded systems Primary storage (Memory) Secondary storage Units Data storage Compression	Networks and topologies Wired and wireless networks, protocols and layers	Threats to computer systems and networks Identifying and preventing vulnerabilities Operating systems Utility software Ethical, legal, cultural and environmental impact	Revision of each of the units for Paper 1 – Computer Systems Revision on the concepts of sequence, selection and iteration for Python	All students must be given the opportunity to undertake a programming task or tasks during their course of study Each task(s) must use one or more high-level text- based programming language, either to a specification or to solve a problem (or problems)	

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Key skills to apply in assessment or exam	Demonstrate and apply knowledge and understanding of the key concepts and principles of Computer Science.	Demonstrate and apply knowledge and understanding of the key concepts and principles of Computer Science.	Demonstrate and apply knowledge and understanding of the key concepts and principles of Computer Science.	Demonstrate and apply knowledge and understanding of the key concepts and principles of Computer Science.	The programming task(s) must allow them to develop skills within the following areas when programming • design • write • test • refine	
Title of Knowledge Organiser	Systems architecture Memory and Storage	Computers networks, connections and protocols Network security	Network security, systems software Ethical, legal, cultural and environmental impacts of digital technology	N/A	N/A	N/A