Year 10	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Knowledge	**Component 1** 1.1 - Systems architecture 1.1.1 - Architecture of the CPU 1.1.2 - CPU Performance 1.1.3 - Embedded systems	**Component 1** 1.2 – Memory and storage 1.2.1 - Primary storage (Memory) 1.2.2 - Secondary storage 1.2.3 - Units 1.2.4 - Data storage 1.2.5 - Compression	**Component 1** 1.3 – Computer networks, connections and protocols 1.3.1 - Networks and topologies 1.3.2 - Wired and wireless networks, protocols and layers	**Component 1** 1.4 – Network security 1.4.1 -Threats to computer systems and networks 1.4.2 - Identifying and preventing vulnerabilities **Component 2** 2.5 – Programming languages and Integrated Development Environments 2.5.1 Languages	**Component 1** 1.5 – Systems software 1.5.1 - Operating systems 1.5.2 - Segmentation Utility software **Component 2** 2.5.2 The Integrated Development Environment (IDE)	**Component 1** 1.6 – Ethical, legal, cultural and environmental impacts of digital technology **Component 2** 2.1 – Algorithms 2.1.1 -Computational thinking 2.1.2 - Designing, creating and refining algorithms 2.1.3 - Searching and sorting algorithms
Skills	• How do computer systems store data • The key methods used to store data • Able to calculate file sizes of image and text files • Produce images based on binary data • Understand how images and sound are encoded	• How do computer systems store data • The key methods used to store data • Able to calculate file sizes of image and text files • Produce images based on binary data • Understand how images and sound are encoded	• How do computer systems store data • The key methods used to store data • Understanding of the use and operation of systems • Identify the parts of the protocol stack	• How do computer systems store data • The key methods used to store data • Understanding of the use and operation of systems • Identify the parts of the protocol stack	• Able to calculate file sizes of image and text files • Produce images • based on binary data • Understand how images and sound are encoded	• Understanding of the use of software • Discuss issues relating to the use of technology and effects on environment and society • Discuss issues relating to the use of technology and effects on environment and society
Independent Learning Link	1.1 End of Topic Quiz	1.2 End of Topic Quiz	1.3 End of Topic Quiz	2.5 End of Topic Quiz	2.5 End of Topic Quiz	2.2 End of Topic Quiz

Year 11	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Knowledge	**Component 1** 1.6.1 - Ethical, legal, cultural and environmental impact **Component 2** 2.3 – Producing robust programs 2.3.1 - Defensive design 2.3.2 - Testing	**Component 2** 2.3 – Producing robust programs 2.3.1 - Defensive design 2.3.2 - Testing 2.4 – Boolean logic	**Component 2** 2.2 – Programming fundamentals 2.2.2 - Data types 2.2.3 - Additional programming techniques	**Component 2** 2.5 – Programming languages and Integrated Development Environments 2.5.1 Languages 2.5.2 The Integrated Development Environment (IDE)	**Component 2** 2.4 – Boolean logic 2.5 – Programming languages and Integrated Development Environments 2.5.1 Languages 2.5.2 The Integrated Development Environment (IDE	
Skills	• Calculation of Binary Values • Calculation of HEX Values • Understanding of Binary Shift • The use of ASCII text	• Understand the HW used to create computer networks • The benefits and disadvantages associated with different networking topologies	• Able to calculate file sizes of image and text files • Produce images based on binary data • Understand how images and sound are encoded • Create test plans and use when programming • Use trace tables	• Understand Boolean logic • Apply Boolean logic • Interpret Boolean logic diagram	• Understand how to programmatically implement the key constructs • Be able to identify the robust programming methods. • Implement testing plans and using trace tables. Constructs in Pseudocode • Able to answer extended questions	
Independent Learning Link	1.6 End of Topic Quiz	2.2 End of Topic Quiz ocr computer science gcse paper 1 j277	2.3 End of Topic Quiz ocr computer science gcse paper 1 j277	2.4 End of Topic Quiz ocr computer science gcse paper 1 j277	2.5 End of Topic Quiz ocr computer science gcse paper 1 j277	