Year 10 Computer Science

Link to J277 spec	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Content Knowledge	1.1 Systems architecture 1.2 Memory and storage	1.3 Computer networks, connections and protocols 1.4 Network security	1.5 Systems software - Operating systems and utility software	1.6 Ethical, legal, cultural and environmental impacts of digital technology	Past paper practice and revision for Mock exam.	Programming project
	Programming practice using Python & OCR Exam Reference Language			Unit 1 Theory Revision	Theory & Programming Revision	Programming practice using Python
Skills	Know the role/purpose of each component and what it manages, stores, or controls during the fetch-execute cycle.	Understands the tasks performed by each piece of hardware and the concept of the Internet as a network of computer networks.	Knows what each function of an operating system does. Understands that: -Data is transferred between devices and the processor -This process needs to be managed	An ability to discuss the impact of technology based around the issues listed above.	Revision and exam techniques.	Able to create solutions to more complex problems using a software development methodology
Key Questions	What actions occur at each stage of the fetch-execute cycle?	What are the different types of network? What are the different types of	What is the difference between operating and utility software?	What are examples of digital technology and how does this impact	How long is the mock exam? What is the best way to answer essay style exam	What problem should my programming project aim to solve?

		protocols?		society?	questions?	
Assessment	Low stakes/POP tests and End of Unit tests.				Exam style practice questions.	Programming project assessment
Literacy/numeracy/SMSC/Character	Emphasis on the mathematical skills used to calculate data storage capacity and to carry out binary conversions and binary arithmetic. Structured writing for long answer examination questions.					
Enrichment opportunities and futures	Online virtual trip to Amazon FC to see robotics in action. This qualification is suitable for learners intending to pursue any career in which an understanding of technology is needed.					