

Qualification: GCSE Computer Science Specification: OCR 9-1 J276

Link to GCSE specification: <http://www.ocr.org.uk/Images/225975-specification-accredited-gcse-computer-science-j276.pdf>

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 9 Topics	Unit 1: How Computers Work Unit 2 Binary Unit 3 Computational Thinking		Unit 4: Scratch for experienced users Unit 5: Hardware Unit 6: Python and Algorithms		Unit 7: Software Unit 8: Ethical, Environmental and legal issues Unit 9: HTML	
Year 9 Rationale	<ul style="list-style-type: none"> This year forms a foundation year for the GCSE Computer Science specification as they are introduced to topics on the specification that will be examined. They start to focus on computational logic and learn how they they can break problems down using pseudocode and flow diagrams. Although, they will only be examined on python they develop their skills in scratch and learn HTML. This helps to develop skills in structuring programs logically. 					
Year 10	Unit 1: Hardware <ul style="list-style-type: none"> System Architecture Memory Storage 	Unit 2: Data Representation Unit 3: Learn to program in python	Unit 4: Networks <ul style="list-style-type: none"> Wired and Wireless networks Network topologies, Protocols and Layers Unit 5: System Software and Security		Unit 6: Translators and facilities of languages	
Year 10 Rationale	<ul style="list-style-type: none"> The students cover all the topics that will be examined on Paper 1: Computer Systems, plus quite a number of the topics for Paper 2: Computational Thinking, algorithms and programming. Once they have completed Unit 3: Learn to program in python, problem solving and programming tasks will be given throughout the year to reinforce the skills they have learnt so that they will be able to start the 20 hour programming project in year 11. 					
Year 11	Unit 7: Review programming techniques. Unit 8: Algorithms Unit 9 Producing Robust programs		Unit 10: Translators and facilities of languages	Revision	Revision	
Year 11 Rationale	<ul style="list-style-type: none"> Students will review the skills required prior to starting the 20 hour programming project in the week beginning the 1st October 2018. This will take 24 lessons to complete. The students will complete this for 2 lessons per the week and will be finished in the week beginning 28th January 2019, this excludes December as it will be mock examinations. All topics for Paper 2: Computational Thinking, algorithms and programming will be covered and revision for both written examinations undertaken. 					