South Nottinghamshire Academy

OCR Comp Science Checklist

Specification - https://www.ocr.org.uk/Images/558027-specification-gcse-computer-science-j277.pdf

Subject Comp Science	Paper 1 + 2	Duration – 2 hours

	What to revise	How to revise it
	1.1 Systems architecture - The CPU - Embedded systems	Page 1 https://www.csnewbs.com/ocr2020-1-3-embeddedsystems Pages 2-5 in revision guide https://student.craigndave.org/videos/ocr-gcse-j277-slr-1-1-common-cpu-components-and-their-function https://student.craigndave.org/videos/ocr-gcse-j277-slr-1-1-the-common-characteristics-of-cpus
	1.2 Memory and storage - Primary storage - Secondary storage - Units - Data storage (binary, characters, images, sound, compression)	Page 4 - 7 https://student.craigndave.org/videos/ocr-gcse-j277-slr-1-2-ram-rom https://student.craigndave.org/videos/ocr-gcse-j277-slr-1-2-the-need-for-secondary-storage Pages 13 – 17 https://www.csnewbs.com/ocr2020-2-4a-numberstorage https://www.csnewbs.com/ocr2020-2-3-dataunits Page 21 https://www.csnewbs.com/ocr2020-2-5-compression Pages 18 – 21 https://www.csnewbs.com/ocr2020-2-4d-soundstorage https://www.csnewbs.com/ocr2020-2-4c-imagestorage
	1.6 Ethical, legal, cultural and environmental impacts - Impacts of digital technology (ethical, legal, cultural, environmental, privacy) - Relevant legislation (Data Protection Act, Computer Misuse Act, Copyright, Regulation of Investigatory Powers)	Pages 34 -39 https://www.csnewbs.com/ocr2020-6-1a-impactsoftechnology https://www.csnewbs.com/ocr2020-6-1b-legislation
	1.3 Computer networks, connections and protocols	Pages 24, 27, 28, 29, https://www.csnewbs.com/ocr2020-3-1a-networkperformance https://www.csnewbs.com/ocr2020-3-1b-hardwareandinternet

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	2.1 Algorithms -Representing algorithms (flowcharts, pseudocode) - Searching algorithms - Sorting algorithms - Algorithm efficiency (time/space complexity)	https://www.csnewbs.com/ocr2020-1-1-computationalthinking https://www.csnewbs.com/ocr2020-1-3-searchingsorting
	2.2 Programming fundamentals - Variables, constants, data types - String manipulation - Input, output, assignment - Arithmetic and Boolean operators - Selection - Iteration	https://www.csnewbs.com/ocr2020-2-1-programfundamentals https://www.csnewbs.com/ocr2020-2-3-additionaltechniques https://www.csnewbs.com/python-9a-string-handling
	2.3 Producing robust programs -Defensive design (validation, authentication, maintainability) - Testing (types of errors, test data, iterative vs final)	https://www.csnewbs.com/ocr2020-3-1-defensivedesign https://www.csnewbs.com/ocr2020-3-2-testing
	2.4 Boolean logic - Logic diagrams and truth tables - Combining operators	https://www.csnewbs.com/ocr2020-4-1-booleanlogic