Year 10 COMPUTER SCIENCE Curriculum Map

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

Term	Topic/Unit title	Essential knowledge and skills (what students should know, understand and be able to do by the end of the unit/topic)
Autumn 1	2.2.1 Programming fundamentals (introduction) 2.1.1 Computational thinking 1.2.4 Data storage – Numbers, Characters, Images, Sound 1.2.3 Units 2.1.2 Designing, creating and refining algorithms	See content for each section in this document: https://www.ocr.org.uk/Images/558027-specification-gcse-computer-science-j277.pdf
Autumn 2	2.2.1 Programming fundamentals 2.2.2 Data types 1.1 – Systems architecture 1.2 – Memory and storage (except 1.2.3 & 1.2.4)	
Spring 1 & 2	Remainder of 2.2 Programming 2.3 Producing robust programs 2.1.3 searching and sorting algorithms	

Summer 1	Revision recapping topics for Year 10 exam	
Summer 2	Programming Task	This is required by the exam board to give students experience in coding a solution to a more complex problem than can normally be attempted in a single lesson. Students learn by trying out ideas and researching the python language looking for suitable sample code

Year 11 COMPUTER SCIENCE Curriculum Map (This year 2023/24 only)

https://www.aqa.org.uk/subjects/computer-science-and-it/gcse/computer-science-8525/specification-at-a-glance

Term	Topic/Unit title	Essential knowledge and skills (what students should know, understand and be able to do by the end of the unit/topic)
Autumn 1	Programming task continues. Relational databases and structured query language (SQL)	Concept of a database. Concept of a relational database. Database concepts: table, record, field, primary key, foreign key.

		Understand that the use of a relational database facilitates the elimination of data inconsistency and data redundancy. Use SQL to retrieve data from a relational database Use SQL to insert data into a relational database using the commands Use SQL to edit and delete data in a database using the commands.
	Ethical, legal and environmental impacts of digital technology on wider society, including issues of privacy	Cyber security Mobile technologies Wireless networking Cloud storage Hacking (unauthorised access to a computer system) Wearable technologies Computer based implants Autonomous vehicles.
Autumn 2	Preparation for PPE Addressing class weaknesses from PPE	
Spring 1	Revision of course content	Focus will be on topics which were general weaknesses for 2023 exam season plus issues from the PPE. Past papers used to assess other content,
Spring 2/Summer 1	Preparation for exams	