Curriculum map - Year 11 Exam board - OCR 2 exams, 50% each Past papers -	https://www.ocr.org.uk/qualifications/gcse/computer-science-j276-fr https://www.ocr.org.uk/qualifications/gcse/computer-science-j276-fr

Autumn 1 -	IDE, Facilities of languages, Black and white box testing and Trace table
Assessment -	Homework and end of unit test. Feedback session
Autumn 2 -	Specialist searching and sorting algorithm. Revision for Mock
Spring 1 -	Analysis of mock result and updating students' plan of action. Revision on programming techniques such as data types, arrays, variabl
Assessment - Walking talking mock -	Homework focusing on past exam questions Whole exam papers for unit 1 and 2 Analysis of student performance
Spring 2 -	Revision on network focusing on LAN+WAN, Client-server vs P2P, topol
Assessment -	Past exam questions and mini assessment
Summer 1 -	Practice on writing algorithms using flow-chart and pseudocode
Paper 1 - Paper 2 -	11th May 2020 14th May 2020

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les, strings, loop, selection, subroutines and file handling

ogies, protocols. Threats to network and prevention

Curriculum map - Year 12

Exam board - OCR	https://www.ocr.org.uk/qualifications/as-and-a-level/computer-science-h046-h446-from-2015/	Suggested weblinks-
2 exams, 50% each		· **Craigndave videos**
Past papers -	https://www.ocr.org.uk/qualifications/as-and-a-level/computer-science-h046-h446-from-2015/assessment/	· **Teach-ict** · **Learncomputing.org** · **Sharepoint student site**
Programming project - 20%		

Timeline	Objectives	Practical activities	Assessment	Feedback and analysis
Autumn 1				
RKH	Characteristics of networks and the importance of protocols and standards. The internet structure: • The TCP/IP Stack. • DNS • Protocol layering. • LANs and WANs. • Packet and circuit switching. Network security and threats, use of firewalls, proxies and encryption. Network hardware. Client-server and peer to peer. Students learn HTML, CSS and JavaScript. Search engine indexing. PageRank algorithm. Server and client side processing.	Creating websites using HTML, CSS and JavaScript. Students will look at code and identify errors.	Homework set weekly to check studnets learning; Plenary using past exam papers, End of unit test.	In class feedback focusing on areas students struggled the most
MBY	CPU, Memory and Storage. Functions of CPU. LMC. Memory and storage. Student will learn about I/O devices.			
Autumn 2				
RKH	(a) Primitive data types, integer, real/floating point, character, string and Boolean. (b) Represent positive integers in binary. (c) Use of sign and magnitude and two's complement to represent negative numbers in binary. (d) Addition and subtraction of binary integers. (e) Represent positive integers in hexadecimal. (f) Convert positive integers between binary hexadecimal and denary. (g) Representation and normalisation of floating point numbers in binary. (h) Floating point arithmetic, positive and negative numbers, addition and subtraction. (i) Bitwise manipulation and masks: shifts, combining with AND, OR, and XOR. (j) How character sets (ASCII and UNICODE) are used	Carry out conversions and binary arithmetics	Homework set on a weekly basis. Practice papers set.	End of unit test. One-to-one feedback with WWW, EBI and target set. End of unit assessment
MBY	System Software. Student will learn about OS and its functions. Utility software and diffetnt types. They will learn about difeernt types of software such as propietary and off the shelf. Students will look into different programming languages such as high and low level.			
Spring 1				
RKH	(a) Define problems using Boolean logic. (b) Manipulate Boolean expressions, including the use of Karnaugh maps to simplify Boolean expressions. (c) Use the following rules to derive or simplify statements in Boolean algebra: De Morgan's Laws, distribution, association, commutation, double negation. (d) Using logic gate diagrams and truth tables. (e) The logic associated with D type flip flops, half and full adders.	Draw out Karnaugh maps to simplify boolean expressions	Past exam questions. Students practice as much simplifying as possible	Homework feedback - self evaluation. End of unit assessment
MBY	Legal, ethical, moral issues. Studnets will learn through class discussion on recent events about the legal and environmental side of Computing.			
Spring 2				
RKH	Students will be taught basic programming techniques. Including how to write basic algorithms in pseudocode and flow charts.	Write pseudocode and programs including output, input, variables, selection, iteration and sub-programs.	Exam style questions for starters/plenary	In class feedback addressing common misconception. One-to-One feedback checking targets, WWW and EBI.
MBY	Software Development. Students will learn about different system life cycles such as agile, RAPID, extreme programming. They will learn about linear and binary seaching algorithms and their real-world application. Students will proceed to program these algorithms for better understanding.			
Summer 1				
RKH	Revise all topics covered throughout the year for mock			
MBY	Revise all topics covered throughout the year for mock		Practice exam papers. Walking talking mock	End of year assessment - receive feedback from mock
Summer 2				
RKH + MBY	Introduction to coursework. Start investigation and analysis for project. Students must write a synopsis of their project idea and write the analysis part after doing research and interview with potential stakeholders.			In class feedback