

**OCR GCSE COMPUTER SCIENCE**

<b>Comp 01: Computer Systems</b>	This is assessed by a written paper, which has a mixture of short and long answer questions. 15% AO1, 22% AO2 and 3% AO3. No calculators allowed. <i>Written paper, 1 hour 30 mins, 80 marks, 50% of qualification.</i>
<b>Comp 02: Computational Thinking, Algorithms and Programming</b>	This is assessed by a written paper, which has a mixture of short and long answer questions. 14% AO1, 14% AO2 and 12% AO3. No calculators allowed. <i>Written paper, 1 hour 30 mins, 80 marks, 50% of qualification.</i>
<b>Comp 03 NEA Programming Project (Year 11)</b>	Students create solutions to programming tasks chosen from a set of options supplied by OCR. Tasks released Sept Year 11. 1% AO1, 4% AO2 and 15% AO3

**Year 9**

Week	WC	Theory		Algorithms & Programming		Notes
0		Topic Focus	Lesson Focus	Topic Focus	Lesson Focus	
1	07/09/2020	Intro & Expectations	Course Overview & What is a Computer System?	2.1 Algorithms	Computational thinking	
2	14/09/2020	Back to the Future	George Boole - Boolean Logic	2.1 Algorithms	Flowcharts	
3	21/09/2020	Back to the Future	Tim Berners-Lee - HTML and WWW	2.1 Algorithms	Flowcharts	
4	28/09/2020	Back to the Future	Creates package - The Difference Engine and Problem Solving	Assesemnt	Assessment on Year 8 Content	
5	05/10/2020	Back to the Future	Alan Turing - Code Breaking	Feedback	Think Pink Go Green	
6	12/10/2020	Back to the Future	Project	2.1 Algorithms	Pseudocode	
7	19/10/2020	Back to the Future	Project	2.1 Algorithms	Pseudocode	
26/10/2020						
02/11/2020						
Half Term						
1	09/11/2020	1.1 Systems Architecture	Components and Purpose	2.1 Algorithms	Interpret, correct or complete algorithms	
2	16/11/2020	1.1 Systems Architecture	Von Neumann Architecture	Python - Basic Functions	Simple conversation using Print	
3	23/11/2020	1.1 Systems Architecture	Fetch Execute Cycle	Python - Input & Output Statements	Guessing game	
4	30/11/2020	1.1 Systems Architecture	Common Characteristics & Performance	Python - Variables	Guessing game advanced	
5	07/12/2020	1.1 Systems Architecture	Embedded Systems	Python - Data Types	Casting and Validation	
6	14/12/2020	ASSESSMENT 1		Python Selection		
7	21/12/2020	Feedback		Python - Loops		
28/12/2020						
04/01/2021						
Christmas						
1	11/01/2021	1.2 Memory	Purpose of ROM & RAM and difference between them	Python - functions	Python - functions	
2	18/01/2021	1.2 Memory	Flash Memory and need for Virtual Memory	Python -List and Dictionaries	Python - Project	
3	25/01/2021	1.2 Storage	Need for secondary storage & common types	Python - Reading and Writing to Files	Python - File Input & Output	
4	01/02/2021	1.2 Storage	Data capacity calculations & using characteristics	Python - Lists and Dictionaries	Python - Project	
5	08/02/2021	Assessment		Python - List and Functions	Python - Project	
6	15/02/2021	Feedback			Python - Project	
22/02/2021						
Half Term						
1	01/03/2021	1.2 Data Representation - Units / Numbers	Measurement of data, conversion of Denary/Binary/Hex	Animation:Blender	Introduction to Animation	
2	08/03/2021	1.2 Data Representation - Text	Character sets, limitations, types (ASCII) conversion.	Animation:Blender	Modelling	
3	15/03/2021	1.2 Data Representation - Images	Bitmap images, resolution (Quality), colour depth.	Animation:Blender	Animating and Parenting	
4	22/03/2021	1.2 Data Representation - Sound	Analogue to digital, sample rate, etc.	Animation:Blender	Advanced Modelling and Colouring	
5	29/03/2021	1.2 Data Representation - Compression	Lossy vs Lossless, types, file extensions.	Animation:Blender	Advanced Modelling and Colouring	
6	05/04/2021	Assessment		Animation:Blender	Proportional Editing	
12/04/2021						
19/04/2021						
Easter						
1	26/04/2021	1.3 Networks - Types / Bandwidth	Simple networks and transmisison media.	1.5 Software - OS -User Interface	types of OS and how the GUI is constructed (WIMP)	
2	03/05/2021	1.3 Networks - Hardware	Components required for network, advantages.	1.5 Software - OS - Management	Roles the OS plays in computer performance.	
3	10/05/2021	1.3 Networks - Client server & P2P / Peer-to-peer	Roles of computers, uses advantages.	1.5 Software - Utility - Common types	Utility programs and importance	
4	17/05/2021	1.3 Networks - The internet / virtual Networks	DNS, Hosting, the cloud.	1.5 Software - Utility - Backup	When and where back-ups are used.	
5	24/05/2021	Assessment				
31/05/2021						
Half Term						
1	07/06/2021	1.6 Ethical Issues	Copyright, Open source vs Proprietary			
2	14/06/2021	1.6 Legal Issues	DPA , Computer Misuse			
3	21/06/2021	1.6 Cultural Issues	?			
4	28/06/2021	1.6 Environmental Issues	e-waste, energy consumption.			
5	05/07/2021	1.6 Privacy Issues	DPA, RIP ACT			
6	12/07/2021	Assessment	End of Year Assessment			
7	19/07/2021	Feedback				