

Sandon Road, Meir, Stoke-on-Trent, ST3 7DF Telephone: 01782 377100 Fax: 01782 377101

Email: info@omera.co.uk Website: www.ormistonmeridianacademy.co.uk

Principal: Mrs C Stanyer

Subject: OCR GCSE Computer Science

Year 10

Curriculum Map

2022 -2023

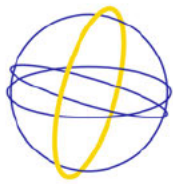
Week Commencing	Topic (including links to additional resources)	Assessment Window
STAFF INSET 05/09 Y7 DAY 06/09 ALL STUDENT IN 07/09	2.4 Boolean logic – Why do computers use binary? AND/OR/NOT gates, truth tables	
12/09/2022	2.4 Boolean logic – Why do computers use binary? AND/OR/NOT gates, truth tables	
19/09/2022	1.2.3 Units – bit, nibble, byte, kilobyte, megabyte, gigabyte, petabyte 1.2.4 Data storage – numbers (binary/hexadecimal)	
26/09/2022	1.2.4 Data storage – Characters (Character sets, ASCII, Unicode)	
03/10/2022	1.2.4 Data storage – Images (pixels, resolution, colour depth, metadata)	
10/10/2022	1.2.4 Data storage – Sound (analogue to digital conversion, sampling, sample rate, bit depth)	
17/10/2022	1.2.5 Data storage – Compression (File types, lossy vs lossless)	AR1
October Half Term		
31/10/2022	2.1 Algorithms - abstraction, decomposition & algorithmic thinking	AR1
7/11/2022	2.1.2 Designing, creating & refining algorithms - Flow charts	

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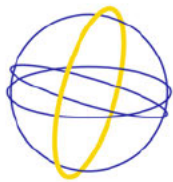
14/11/2022	2.1.2 Designing, creating & refining algorithms - Pseudocode	
21/11/2022	2.2.1 Programming fundamentals – Variables: inputs, outputs and assignment	
28/11/2022	2.2.1 Programming fundamentals – Operators 2.2.2 Data types - String, integer, Boolean, float	
5/12/2022	2.2.1 Programming fundamentals – Controlling program flow (Selection)	
12/12/2022	2.2.1 Programming fundamentals – Controlling program flow (Iteration)	
Christmas Break		
02/01/2023	2.2.3 Additional programming techniques – string manipulation	
9/01/2023	2.2.3 Additional programming techniques – File handling	
16/01/2023	2.2.3 Additional programming techniques – Arrays & SQL	
23/01/2023	AR2 revision	
30/01/2023	Practical programming/AR2 revision	AR2
6/02/2023	Practical programming/DDI	AR2
13/02/2023	1.1.1 Architecture of the CPU – Registers, Von Neumann	

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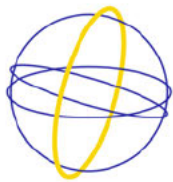
February Half Term		
27/02/2023	1.1.1 Architecture of the CPU – Registers, Von Neumann	
6/03/2023	1.1.2 CPU performance – Cores, cache and clock speed	
13/03/2023	1.1.3 Embedded systems 1.2.1 Primary storage RAM/ROM, virtual	
20/03/2023	1.2.1 Primary storage - RAM/ROM, virtual	
27/03/2023	1.2.2 Secondary storage - Optical, magnetic, solid state, flash	
Easter		
17/04/2023	1.2.2 Secondary storage (Optical, magnetic, solid state, flash)	
24/04/23	1.3.1 Network topologies – LAN vs WAN, Star vs Mesh	
1/05/2023	1.3.1 Network topologies – Network hardware & performance factors	
8/05/2023	1.3.1 Network topologies – Virtual networks	
15/05/23	1.3.2 Wired & Wireless networks, protocols & layers – Ethernet/WIFI	
22/05/23	1.3.2 Wired & Wireless networks, protocols & layers – SMTP/POP/FTP/HTTPS	

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May Half Term		
05/06/2023	1.3.2 Wired & Wireless networks, protocols & layers – IP vs MAC	
12/06/2023	1.4.1 Threats to computer systems and networks – Malware, social engineering, data interception & theft	
19/06/2023	1.4.2 Identifying and preventing vulnerabilities – Firewall, anti-malware, penetration testing	
26/06/2023	AR3 revision	AR3
3/07/2023	Practical programming/DDI	AR3
10/07/2023	Practical programming	
17/07/2023	Practical programming	
24/07/2023	Practical programming	

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