

IGCSE 0478 / 0984 Specification map

For examination from 2023

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8	Unit 9	Unit 10
1 Data representation										
1.1	Number systems	✓								
1.2	Text, sound and images	✓								
1.3	Data storage and compression	✓								
2 Data transmission										
2.1	Types and methods of data transmission		✓							
2.2	Methods of error detection		✓							
2.3	Encryption		✓							
3 Hardware										
3.1	Computer architecture			✓						
3.2	Input and output devices				✓					
3.3	Data storage			✓						
3.4	Network hardware					✓				
4 Software										
4.1	Types of software and interrupts						✓			
4.2	Types of programming language, translators and integrated development environments (IDEs)						✓			
5 The internet and its uses										
5.1	The internet and the world wide web					✓				
5.2	Digital currency					✓				
5.3	Cyber security					✓				
6 Automated and emerging technologies										
6.1	Automated systems							✓		
6.2	Robotics							✓		
6.1	Artificial intelligence							✓		
7 Algorithm design and problem-solving										
7	Algorithm design and problem-solving								✓	
8 Programming										
8.1	Programming concepts								✓	
8.2	Arrays								✓	
8.3	File handling									✓
9 Databases										
9	Databases									✓
10 Boolean logic										
10	Boolean logic									✓

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2020-2021 Syllabus

Notes: Units 7 and 8 are designed to cover the theoretical elements of Section 2. It is intended that the remainder of the guided learning hours are spent learning how to program.

	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
1.1 Data representation								
1.1.1 Binary Systems	✓							
1.1.2 Hexadecimal	✓							
1.1.3 Data storage	✓		✓					
1.2 Communication and Internet technologies								
1.2.1 Data transmission		✓						
1.2.2 Security aspects		✓						
1.2.3 Internet principles of operation		✓						
1.3 Hardware and software								
1.3.1 Logic gates			✓					
1.3.2 Computer architecture and the fetch-execute cycle			✓					
1.3.3 Input devices				✓				
1.3.4 Output devices				✓				
1.3.5 Memory, storage devices and media			✓					
1.3.6 Operating systems					✓			
1.3.7 High-and-low-level languages and their translators					✓			
1.4 Security								
1.4.1 Safety of data					✓			
1.4.2 Firewalls, protocols and encryption					✓			
1.4.3 Online system security					✓			
1.4.4 Real-life applications					✓			
1.5 Ethics								
1.5.i Copyright and plagiarism						✓		
1.5.ii Software, freeware and shareware					✓			
1.5.iii Ethical issues, hacking, cracking and malware		✓				✓		
2.1 Algorithm design and problem-solving								
2.1.1 Problem-solving and design							✓	✓
2.1.2 Pseudocode and flowcharts							✓	
2.2 Programming								
2.2.1 Programming concepts							✓	
2.2.2 Data structures; arrays							✓	
2.3 Databases								
2.3 Data types, primary keys and QBE								✓