

Week Start	Content Description	Assessment	Events
September			
3rd	Review Topic 1: Data representation <ul style="list-style-type: none"> • Number systems • Text, sound and images • Data storage and file compression Topic 2: Data transmission <ul style="list-style-type: none"> • Types and methods of data transmission • Methods of error detection • Encryption Topic 3: Hardware <ul style="list-style-type: none"> • Computer architecture • Input and output devices • Data storage • Network hardware 	Multiple choice quiz, observations, worksheets	
10 th	Review Topic 4: Software <ul style="list-style-type: none"> • Types of software and interrupts • Types of programming language, translators and integrated development environments (IDEs) Topic 5: The internet and its uses <ul style="list-style-type: none"> • The internet and the WWW • Digital currency • Cyber Security 		10-14 th CEM Assessments (7,9 & 11) 14 th Target Grades Deadline (8,10, 12) 14 th Year 7 Picnic
17 th	Topic 7 Algorithm and problem solving A) The program development life cycle: analysis, design, coding and testing B) Computer systems and sub-systems; problem decomposition; methods to design and construct a solution to a problem	Baseline assessment	17-20 th CEM Assessments (7,9 & 11)
24 th	Topic 7 Algorithm and problem solving C) The purpose of a given algorithm D) Standard methods of solution E) The need for validation and verification checks on input data; different types of validation and verification checks	Basic algorithm assessment	28 th Prophet's Birthday - Observed
October			

1st	Topic 7 Algorithm and problem solving F) Use of test data G) Use of trace tables to document dry-runs of algorithms		4 th Swimming Gala 5 th Armed Forces Day
8 th	Topic 7 Algorithm and problem solving H) Identification and correction of errors in algorithms I) Writing and amending algorithms for given problems/ scenarios, using pseudocode, program code and flowcharts	End of topic 7 test "advanced algorithm"	8 th Target Grade Deadline (7,9,11) 10 th Careers Day
15 th	Practice exam style questions		
22 nd	Half Term Break		
29 th	Practice exam style questions from previous past papers		31 st Orange and Black Day
November			
5 th	Topic 8 Programming 8.1 Programming concepts A) Declare and use variables and constants B) Basic data types C) Input and output		
12 th	8.1 Programming concepts D) Sequence; selection; iteration; totalling; counting; string handling; and arithmetic, logical and Boolean operators	Programming fundamentals assessment	
19 th	8.1 Programming concepts E) Nested statements		AP1 Written Comments Deadline
26 th	8.1 Programming concepts F) Procedures, functions and parameters; local and global variables G) Library routines	Advanced programming assessment	
December			
3 rd	8.1 Programming concepts H) Creation of a maintainable program		4 th First Day AP1 Exams
10 th	Practice past paper		15 th Last Day AP1 Exams
17 th	Practice past papers	End of term assessment	22 nd Winter Break
25 th	Winter Break		
January			
1 st	Winter Break		
7 th	Topic 9 Database A) Single-table database B) Basic data types for databases C) Primary key, including identifying a suitable primary key	End of topic 9 assessment	8 th First Day

	D) Use of SQL scripts to query data stored in a single-table database		
14 th	Topic 10 Boolean logic A) Standard symbols for logic gates B) Functions of the logic gates		
21 st	C) Use of logic gates to create given logic circuits; complete truth tables; write logic expressions	End of topic 10 assessment	25 th National Holiday
28 th	Review Paper 2 topics		
February			
4 th	Topic 6 Automated and emerging technologies 6.1 Automated systems A) The use of sensors, microprocessors and actuators to create automated systems B) The advantages and disadvantages of automated systems used for given scenarios		
11 th	6.2 Robotics A) Robotics B) The characteristics of a robot C) The roles that robots can perform and the advantages and disadvantages of their use 6.3 Artificial intelligence A) Artificial intelligence (AI) 2 The main characteristics of AI (the collection of data and the rules for using that data, the ability to reason, and can include the ability to learn and adapt) B) The basic operation and components of AI systems to simulate intelligent behaviour	End of topic 6 assessment	
18 th	Practice past papers		21-22 nd Half Term
25 th	Practice past papers		
March (10th Ramadan Starts)			
3 rd	Reflecting on Feedback given from summative assessment and target setting	Summative assessment	
10 th	Review Paper 1 topics		
17 th	Review Paper 1 topics		
24 th	Practice past papers		
April			
31 st	Practice past papers		
7 th	Practice past papers		10-11 th Eid Holiday
14 th	Practice past papers		
21 st	Practice past papers		25 th Spring Break

28 th	Spring Break		
May			
5 th			7 th Start of Term 2
12 th			
19 th			
26 th			
June			
2 nd			6 th End of year assembly
9 th			12 th Last day for Students 13 th Last day for Teachers
End of Year			
<u>Additional Notes:</u>			