

BTHCC Computer Science Curriculum



In Computing we develop innovative future leaders in the digital world who can use computational thinking to solve real world problems. We are dedicated to providing our students with the knowledge and tools to use technology responsibly, safely and ethically. We strive to ensure that the skills and foundations of IT systems help students in their future careers.

	HT 1	HT 2	HT 3	HT 4	HT 5	HT 6	
YEAR 7	Collaborating online safely	Binary Numbers	Scratch	Components of computers	App Development	Networks	
YEAR 8	Binary images	Computer Crimes Database	Website Development	Introduction to Python Programming through Rapid Router		Computer Systems	
YEAR 9	Binary sound	The impact of Computers	Python Programming	Network Hardware security	3D Modelling	Handling Data	
YEAR 10 Paper 2 (2 hours) Paper 1 (1 hour)	3.3 Data Representation		3.4 Computer Systems			3.5 Computer Networks	
	3.1 Fundamentals of Algorithms	3.2 Programming- Python					
YEAR Paper 2 (2 hours) Paper 1 (1 hour)	3.6 Cyber Security	3.7 Databases and SQL	3.8 Impacts	3.3 Data Representation	3.4 Computer Systems	3.5 Networks	Paper 1 KNOWLEDGE AND SKILLS RECALL AND RETRIEVAL BASED ON: IN CLASS ASSESSMENT, FEEDBACK AND QUESTION LEVEL ANALYSIS SPECIFIC TO CLASS REQUIREMENTS Paper 1 and Paper Exams
	3.1 Fundamentals of Algorithms						
Year 12	Fundamentals of data representation Fundamentals of computer systems Fundamentals of computer organisation and architecture Consequences of uses of computing	Fundamentals of communication and networking Consequences of uses of computing Big Data Fundamentals of databases	Fundamentals of data structures Fundamentals of programming	Fundamentals of algorithms Fundamentals of programming	NEA Programming Project · Analysis · Design · Implementation		
Year 13- Recall and Revision for Paper 2 Data, Networks, Computer Systems, Organisation and Architecture, Consequences, Big Data and Databases							
Year 13	NEA- Programming Project Implementation Testing Evaluation	Fundamentals of programming Fundamentals of data structures Fundamentals of algorithms Theory of computation	Prep for Skeleton Code	Recall and Revision for Paper 2			Paper 1 and 2 A Level Exams
				Recall and Revision for Paper 1			
				Skeleton Code Theory and Practical Tasks			