Year 11 – Computer Science GCSE					
Curriculum intent	The aim of the curriculum is that learners are provided with the opportunity to foster a love for learning by building upon the knowledge, understanding and skills established through the computer science elements of the programme of study at key stage 3, satisfying the computer science elements of key stage 4 and enabling learners to progress into further learning and/or employment.				
Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Knowledge	**Algorithms** – Review of previous learning including representing algorithms, efficiency of algorithms, Searching algorithms and sorting algorithms **Relational databases and structures query language –** Concepts of databases and relational databases, Structured Query Language (SQL) key commands	**Programming –** Data types, programming concepts, Arithmetic operations, Relational operations, Boolean operations, data structures, Input/output, String Handling, Random umber generation, structured programming and subroutines, Robust and secure programming.	**Programming –** Data types, programming concepts, Arithmetic operations, Relational operations, Boolean operations, data structures, Input/output, String Handling, Random umber generation, structured programming and subroutines, Robust and secure programming.	Revision of Key Knowledge identified through various assessment and tailored to cohort.	Revision of Key Knowledge identified through various assessment and tailored to cohort.	
Skills	Problem solving Testing,	Problem solving, Description,	Problem solving, Description,	Problem solving	Problem solving	

_(table continues across Term columns Autumn 1 through Summer 2)

	Explanation, Evaluation Abstraction Application of computing-related mathematics Use of SQL	Explanation, Designing, writing, testing, refining. Validation Evaluation Abstraction Application of computing-related mathematics Programming in Python	Explanation, Designing, writing, testing, refining. Validation Evaluation Abstraction Application of computing-related mathematics Programming in Python	Designing, writing, testing, refining. Security techniques, Validation, Authentication, Evaluation Abstraction Application of computing-related mathematics, Use SQL, Programming in Python	Designing, writing, testing, refining. Security techniques, Validation, Authentication, Evaluation Abstraction Application of computing-related mathematics, Use SQL, Programming in Python	
Assessme nts	Formative: Retrieval activities, including literacy focus on key vocabulary Summative: Algorithms assessment SQL Assessment	Formative: Retrieval activities, including literacy focus on key vocabulary Summative: Paper 2 assessment	Formative: Retrieval activities, including literacy focus on key vocabulary Summative: Programming assessment	Formative: Retrieval activities, including literacy focus on key vocabulary Summative: Paper 1 assessment	Formative: Retrieval activities, including literacy focus on key vocabulary Summative: GCSE Final Examinations	
Enrichme nt	Key topics support: https://teach-ict.com/2016/GCSE_Computing/AQA_8525/aqa_8525_home.html https://www.bbc.co.uk/bitesize/examspecs/zkwsjhv	Key topics support:https://teach-ict.com/2016/GCSE_Computing/AQA_8525/aqa_8525_home.html https://www.bbc.co.uk/bitesize/examspecs/zkwsjhv	Key topics support:https://teach-ict.com/2016/GCSE_Computing/AQA_8525/aqa_8525_home.html https://www.bbc.co.uk/bitesize/examspecs/zkwsjhv	Key topics support:https://teach-ict.com/2016/GCSE_Computing/AQA_8525/aqa_8525_home.html https://www.bbc.co.uk/bitesize/examspecs/zkwsjhv	Key topics support:https://teach-ict.com/2016/GCSE_Computing/AQA_8525/aqa_8525_home.html https://www.bbc.co.uk/bitesize/examspecs/zkwsjhv	

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	Understanding Python Support: https://www.csnewbs.com/python	Understanding Python Support: https://www.csnewbs.com/python			