GSA Curriculum Map 2021-22: ICT, Business and Computing

We aim to develop all students into successful and competent programmers who:

- have the desire to develop and apply their analytical, problem-solving, design, and computational thinking skills within programming and Computing as a whole.
- become digitally literate – able to use, and express themselves and develop their ideas through information and communication technology – at a level suitable for the future workplace and as active participants in a digital world.
- understand the impacts of digital technology to the individual, wider society

	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
Year 12 - AQA Computer Science - 7517 (Paper 2)						
Subject	**Computer Science**					
Topics	4.5 Data Representation 4.1 Fundamentals of Programming	4.9 Fundamentals of Communications and Networking 4.11 Big Data	4.1 Fundamentals of Programming 4.9 Fundamentals of Communications and Networking	4.6 Fundamentals of Computer Systems 4.8 Consequences of using Computers	4.10 Fundamentals of Databases 4.1 Fundamentals of Programming	4.7 Organisation and Architecture 4.12 Functional Programming 4.14 Non Exam Assessment - Analysis
Skills	Number Systems Number Bases Binary Number System Information Coding Systems	Communication Networking Programming Data Manipulation	Communication Networking Programming	Hardware and Software Classifications of Programming Languages Problem Solving	Problem Solving Programming Languages	Hardware and Software Classifications of Programming Languages Problem Solving
Cross curricular Links	**Cross-curricular links Autumn 2** Further Maths - Y12 Graphs Linear Programming					
Links	4.5 4.1	4.9 4.11	4.1 4.9	4.6 4.8	4.10 4.1	4.7 4.12

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 13 - AQA Computer Science - 7517 (Paper 1)						
Subject	**Computer Science**					
Topics	4.2 Fundamentals of Data Structures 4.14 Non Exam Assessment 4.1 Practice Electronic Assessment Paper 1	4.3 Fundamentals of Algorithms 4.14 Non Exam Assessment 4.1 Programming	4.10 Big Data 4.1 Practice Electronic Assessment Paper 1 4.14 Non Exam Assessment	4.11 Fundamentals of Functional Programming 4.14 Non Exam Assessment	Exam Revision Paper 1 & 2	Exam Revision Paper 1 & 2
Skills	Algorithms Problem Solving Decomposition Abstraction Programming Literacy	Algorithms Problem Solving Decomposition Abstraction Programming Literacy	Algorithms Problem Solving Decomposition Abstraction Programming Data Handling	Algorithms Problem Solving Decomposition Abstraction Programming Literacy	Exam Writing Techniques	Exam Writing Techniques
Cross - Curricular Links	**Cross-curricular links** Further Maths: Autumn 1 - Complex Numbers, Further Maths: Spring 1 - Vectors					
Links	4.2 4.14 4.1	4.3 4.14 4.1	4.10 4.1 4.14	4.11 4.14		