The Quality of Education:

Computing and Business - Curriculum Map

St Christopher's:
A Church of England Academy

Computing and Business - Curriculum Map

Key Stage 3: Computer Science

Year	Half-term 1	Half-term 2	Half-term 3	Half-term 4	Half-term 5	Half-term 6
7 **x2 lessons** **per fortnight**	Impact of technology - Collaborating online respectfully Summative assessment	Modelling data – Spreadsheets Summative assessment/ practical	Networks from semaphores to the Internet Summative assessment	Programming essentials in Scratch – part I	Programming essentials in Scratch – part II Summative assessment	Using media – Gaining support for a cause Summative assessment
8 **x2 lessons** **per fortnight**	Computing systems Summative assessment	Developing for the web Summative assessment	Introduction to Python programming Summative assessment	Media – Vector graphics Summative assessment	Mobile app development Summative assessment	Representations – from clay to silicon Summative assessment
9 **x2 lessons** **per fortnight**	Cybersecurity Summative assessment	Data science Summative assessment	Media – Animations Summative assessment	Physical computing Summative assessment	Python programming with sequences of data Summative assessment	Representations – going audio-visual Summative assessment

Key Stage 4: Computer Science

Year	Half-term 1	Half-term 2	Half-term 3	Half-term 4	Half-term 5	Half-term 6
10 **x5 lessons** **per fortnight**	Introduction to course SLR 1.1 Systems architecture SLR 1.2 Memory Intro to Python End of unit Assessment	SLR 1.3 Storage SLR 1.4 Wired and wireless networks Python practical End of unit Assessment	SLR 1.5 Network topologies, protocols and layers Python practical End of unit Assessment	SLR 1.6 System security SLR 1.7 Systems software End of unit Assessment	SLR 2.1 Algorithms Python practical's interweave End of unit Assessment	SLR 2.4 Computational logic SLR 2.5 Translators and facilities of languages
11 **x5 lessons** **per fortnight**	SLR 2.6 Data representation End of unit Assessment PPE preparation	NEA Hours 1-7 Extended programming practice PPE preparation	NEA Hours 8-20 Catch up time and padding PPE	SLR 2.2 Programming fundamentals SLR 2.3 Producing robust programs End of unit Assessment	SLR 1.8 Ethical, legal, cultural and environmental concerns Extended writing Exam practice	

Key Stage 4: Business

Year	Half-term 1	Half-term 2	Half-term 3	Half-term 4	Half-term 5	Half-term 6
10 **x5 lessons** **per fortnight**	1 Business Activity Diagnostic & summative assessment	2 Influence on Business Diagnostic & summative assessment	3 Business Operations Diagnostic & summative assessment	4 Business Finance (1) Diagnostic & summative assessment	5 Marketing (1) Diagnostic & summative assessment	5 Marketing (1) Y10 PPE
11 **x5 lessons** **per fortnight**	4 Business Finance (2) Diagnostic & summative assessment	6 Human Resources (1) Y11 PPE	6 Human Resources (2) Diagnostic & summative assessment	The interdependent nature of business Exam preparation, extended writing practice	Exam preparation	

Key Stage 5: Computer Science

Year	Half-term 1	Half-term 2	Half-term 3	Half-term 4	Half-term 5	Half-term 6
12 **x9 lessons per fortnight**	1.5.2 Moral and ethical Issues 2.2.1 Programming techniques 2.1 Elements of computational thinking 2.2.2 Computational methods are analysed here Assessment practical & written	1.1.1 Structure and function of the processor 1.1.2 Types of processor 1.1.3 Input, output and storage Practical programming LMC prt I Assessment written	1.2.1 Systems Software 1.2.2 Applications Generation 1.2.4 Types of Programming Language Practical programming LMC prt II 2.1 (ct) 2.2.1 (pt) 2.2.2 (cm) Assessment written	1.4.1 Data Types 1.4.2 Data Structures Assessment written	1.4.3 Boolean Algebra 1.4.2 Data Structures Assessment written	1.4.2 Data Structures 2.3.1 Algorithms prt I 2.2.1 Programming techniques 2.2.2 (cm)
13 **x9 lessons per fortnight**	3.1 Analysis (2 lpr) 1.2.3 Software Development (Methodologies) 2.3.1 Algorithms II (Big 0) 1.3.1 Compression, Encryption and Hashing 1.3.3 Networks 1.3.4 Web Technologies Assessment written	3.1 Design (2 lpr) 1.2.3 Software Development (Methodologies) 2.3.1 Algorithms III 2.2.2 (cm) 1.3.2 Databases Assessment written	3.1 Development / Testing (2 lpr) 1.2.3 Software Development (Methodologies) 2.2.1 Programming techniques (OO) 1.2.4 Types of Programming Language (e) Assessment written	3.4 Evaluation (2 lpr) 1.2.3 Software Development (Methodologies) 1.5.1 Legal, moral, cultural and ethical issues 1.5.2 Moral and ethical Issues Exam Preparation	1.5.2 Computer-related legislation Revision 3.0 NEA completion 1.2.3 Software Development (Methodologies) Independent use of Mock examinations series Exam Preparation	