

Curriculum Map

Subject

Computing

Year

10 & 11

Unit	Summary	Skills	Assessment	British Values and SMSC	Career links	Cross-curricular links
Systems Architecture	Students gain an oversight of the inner workings of the CPU and CPU specific functions, and how the Von Neumann architecture operates.	Team work Presentation skills Animation skills	Exam based questions Online recall quizzing	Social Cultural	Programmer Systems Analyst Business Analyst Hardware Engineer	Maths STEM Science
Memory & Storage	Students learn the difference between primary and secondary memory, Common memory technologies and methods of data representation.	Persuasive arguments Sequence Selection	Exam based questions Online recall quizzing	Social Cultural	Programmer Systems Analyst Business Analyst	Maths STEM Science Technology
Computer networks, connections & protocols	Students cover the different in LANs/WANs and different network hardware along with factors which affect network performance.	Sequence Abstraction Decomposition Presentation skills Analytical skills	Exam based questions Online recall quizzing	Social Cultural	Programmer Systems Analyst Business Analyst	Maths STEM Science Technology
Network Security	Students look at types of attacks and preventative measures which can be used to negate potential attacks.	Abstraction Decomposition Analytical skills	Exam based questions Online recall quizzing	Moral Rule of Law Social Cultural	Programmer Systems Analyst Business Analyst	Maths STEM Science Technology
System Software	Students gain an oversight of the use of the OS and its functions used to maintain and improve performance.	Sequence Abstraction Decomposition Presentation skills Analytical skills	Exam based questions Online recall quizzing	Social Moral	Programmer Systems Analyst Business Analyst	Maths STEM Science Technology
Ethical, legal cultural and environmental impacts of digital technology	Students discuss a range of issues and the impact on stakeholders and technology.	Persuasive Arguments Extended writing	Exam based questions Online recall quizzing	Rule of Law Individual Liberty Mutual Respect Social Moral	Programmer Systems Analyst Business Analyst Journalist	Maths STEM Science Technology Geography English

Algorithms	Students break down problems and representing these in visual formats e.g. flowcharts.	Sequence Abstraction Decomposition Flow charting skills Diagramming	Exam based questions Online recall quizzing	Social Moral	Programmer Systems Analyst Business Analyst	Maths STEM Science
Programming Fundamentals	Students explore the key programming constructs of sequence, selection and iteration.	Sequence Abstraction Decomposition Programming	Exam based questions Online recall quizzing	Rule of Law Social Cultural	Programmer Systems Analyst Business Analyst	Maths STEM Science
Producing robust programs	Students cover how to design programs that survive contact with the users.	Sequence Abstraction Decomposition Programming	Exam based questions Online recall quizzing	Social Cultural	Programmer Systems Analyst Business Analyst User Interface Designer	Maths STEM Science
Boolean logic	Students explore how Boolean logic is used in electronics.	Sequence Abstraction Decomposition Modelling	Exam based questions Online recall quizzing	Social Cultural	Programmer Systems Analyst Business Analyst Engineer	Maths STEM Science
Programming languages * IDEs	Students look at the characteristics between high- and low-level languages and the features that IDEs offer.	Sequence Abstraction Decomposition	Exam based questions Online recall quizzing	Social Cultural	Programmer Systems Analyst Business Analyst Software Developer	Maths STEM Science