

KS3 Computer Science – SOW

Year 7					
Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
e-Safety and file management	My digital world	Computational Logic with Code.org/ Course	1 Scratch Programming	Computer Hardware and Software	Web development
<ul style="list-style-type: none"> File and folders Using email Cyberbullying Mini Project on bullying and cyberbullying (4-5 weeks) Assessment 	<ul style="list-style-type: none"> What to trust online How to search smart Copyrights and copywrongs Staying safe online Evidencing Cyberbullying Assessment 	<ul style="list-style-type: none"> Variables Sequencing Debugging Algorithms Looping Assessment 	<ul style="list-style-type: none"> Movement Scoring Levels Design a game that put to use skill learned and knowledge of computational thinking Assessment 	<ul style="list-style-type: none"> What is a computer What is inside a computer How a computer works CPU Revision Assessment 	<ul style="list-style-type: none"> What is a website Website review HTML Web development Plan Build Assessment
Year 8					
Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
E-Safety	Computational thinking	Data handling	Computer Hardware and Software	Binary Bits and Bobs	Introduction to Python
<ul style="list-style-type: none"> Introduction Impact of technology Respectful online communication Presenting to an audience Online grooming Sexting Project Assessment 	<ul style="list-style-type: none"> Introduction to computational thinking Decomposition Abstraction Pattern Recognition Algorithmic thinking Assessment 	<ul style="list-style-type: none"> Introduction to Excel Excel functions/ Formula Formatting/ Conditional formatting Data modelling Charts Projects/ assessment 	<ul style="list-style-type: none"> What is a computer What is inside a computer How a computer works CPU Revision Assessment 	<ul style="list-style-type: none"> Binary number system Adding binary numbers ASCII Characters and code breaking Bitmap Images and cryptic pictures Sound representation Assessment 	<ul style="list-style-type: none"> First program in Python Output/inputs Variables Data types Maths Selection Consolidation Assessment
Year 9 Computer Science					
Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Introduction to Python	Computer hardware	Back to the future	Python Turtle	More Python Programming	ICT/Web development
<ul style="list-style-type: none"> First program in Python Output/inputs Variables Data types Maths Selection Consolidation Assessment 	<ul style="list-style-type: none"> Components of a computer with respect to input, output and storage Function of CPU, RAM, BIOS, Hard disks Peripherals and function Assessment 	<ul style="list-style-type: none"> Alan Turing and code breaking Sir Tim Berners and the WW W Google Boole and Logic gates Charles Babbage and sorting algorithms Revision - timeline mind map Assessment 	<ul style="list-style-type: none"> Basics Repeating instructions Turtles Inputs Turtle Subroutines Turtle Random If Function Turtle Random Shapes Assessment 	<ul style="list-style-type: none"> Remembering outputs, inputs, variables, data types and maths Remembering if-else Multiple selection Iteration while loops Iteration for loops Mini project Assessment 	<ul style="list-style-type: none"> Project Computing Project Computing Project Computing Project Computing Project Computing Project Computing HTML/ CSS Web development project Music festival Project Programming workbook 2 Book of programming

Year 9 BTEC in DIT					
Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Spreadsheet Modelling	Intro to design principles	Intro to project management	Mitigating Risk	Music Festival Project - phase 1	Music Festival Project - Phase 2
<ul style="list-style-type: none"> • Formula and functions • Conditional formatting • More functions • Sorting data • Graphs and charts • Relative and absolute cell referencing • Assessment 	<ul style="list-style-type: none"> • Mind mapping • Visualisation • File format and convention • Target audience • Data protection • Legislation • Assessment 	<ul style="list-style-type: none"> • User requirement • Planning tools • SWOT analysis • Documentation • Project management • Assessment 	<ul style="list-style-type: none"> • What is risk? • Cyber security risks • Legislation • SMART goals/objectives • Assessment 	<ul style="list-style-type: none"> • Activity 1 • Activity 2 	<ul style="list-style-type: none"> • Activity 3 • Activity 4