KS3 Computing NC Criteria Mapping

The curriculum is primarily delivered on digital dropdown days, where all students work on Chromebooks in workshops delivered by external agencies who come in to teach the subject content.

Key:

Digital Dropdown day to cover content	Drop-down day used to cover other content

Subject Content				
	Year 7 and 8		**Year 9**	
	Thursday 10th March	**Tuesday 19th July**	**Tuesday 8th March**	**Tuesday 19th July**
1. design, use and evaluate computational abstractions that model the state and behaviour of real-world problems and physical systems	Digital Dropdown day – 10th March		Digital Dropdown day – 8th March	
2. understand several key algorithms that reflect computational thinking [for example, ones for sorting and searching]; use logical reasoning to compare the utility of alternative algorithms for the same problem	Digital Dropdown day – 10th March		Digital Dropdown day – 8th March	
3. use two or more programming languages, at least one of which is textual, to solve a variety of computational problems; make appropriate use of data structures [for example, lists, tables or arrays]; design and develop modular programs that use procedures or functions	Digital Dropdown day – 10th March		Digital Dropdown day – 8th March	
4. understand simple Boolean logic [for example, AND, OR and NOT] and some of its uses in circuits and programming; understand how numbers can be represented in binary, and be able to carry out simple operations on binary numbers [for example, binary addition, and conversion between binary and decimal]	Digital Dropdown day – 10th March		Digital Dropdown day – 8th March	

5. understand the hardware and software components that make up computer systems, and how they communicate with one another and with other systems		Digital Dropdown day – 19th July		Digital Dropdown day – 19th July
6. understand how instructions are stored and executed within a computer system; understand how data of various types (including text, sounds and pictures) can be represented and manipulated digitally, in the form of binary digits		Digital Dropdown day – 19th July		Digital Dropdown day – 19th July
7. undertake creative projects that involve selecting, using, and combining multiple applications, preferably across a range of devices, to achieve challenging goals, including collecting and analysing data and meeting the needs of known users		Digital Dropdown day – 19th July		Digital Dropdown day – 19th July
8. create, re-use, revise and re-purpose digital artefacts for a given audience, with attention to trustworthiness, design and usability		Digital Dropdown day – 19th July		Digital Dropdown day – 19th July
9. understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy; recognise inappropriate content, contact and conduct and know how to report concerns.	Delivered through PSHE in tutor time: Year 7, term 3: E-safety and me	Delivered through PSHE in tutor time: Year 8, term 3: E-safety and me	Delivered as an assembly, week 3 Term 4.	

KS4 Computing NC Criteria Mapping

Subject Content	Location if not in discrete lesson **OR** Reason why this is not needed in your context for some or all learners **OR** What do you do that is different that has the same aim or ambition	
	Year 10 **Tuesday 29th March**	**Year 10** **Tuesday 19th July**
1. Develop their capability, creativity and knowledge in computer science, digital media and information technology	Digital Dropdown day – 29th March	
2. Develop and apply their analytic, problem-solving, design, and computational thinking skills		Digital Dropdown day – 19th July
3. Understand how changes in technology affect safety, including new ways to protect their online privacy and identity, and how to identify and report a range of concerns	Digital Dropdown day – 29th March	Digital Dropdown day – 19th July