

The aim of our Key Stage 3 curriculum is to deliver a curriculum in line with feeder schools to allow for a smooth reintegration when pupils return to mainstream education.

Aligning with the National Curriculum for Computing:

Our Digital Technology curriculum adheres closely to the guidelines outlined in the National Curriculum for Computing.

We focus the three core aspects: computer science, information technology, and digital literacy based on research published in May 2022.


<https://www.gov.uk/government/publications/research-review-series-computing/research-review-series-computing#curriculum>

Computer Science (CS): Our aim is to help pupils with understanding of computer science principles, including algorithms, programming, and computational thinking. Pupils will develop skills in coding languages, Scratch and Python, enabling them to create programs, solve problems, and design innovative solutions.

Information Technology (IT): Pupils are supported to work confidently with information technology. Pupils gain the practical knowledge necessary to use technology effectively. We emphasise termly, the importance of digital privacy, digital security, to ensure our pupils are safe and responsible in their digital world

Digital Literacy (DL): Digital literacy is an essential component of modern education. Our pupils develop the ability to express themselves creatively through digital media, harnessing a range of tools and platforms. They learn to critically evaluate information sources, engage in online communication responsibly, and navigate the digital world with confidence.

	Theme	Topic	Knowledge
Autumn 1	Information Technology	Spreadsheet Software Gifted & Talented potential to achieve ICDL BCS L1 Spreadsheet Software MS Excel 2019 Cert UK Eng	<ul style="list-style-type: none"> • Enter and edit numerical and other data accurately • Store and retrieve spreadsheet files effectively • Select and use appropriate tools and techniques to format spreadsheet cells, rows and columns • Use formulas to meet calculation requirements • Use functions to meet calculation requirements • Identify which chart or graph type to use to display information • Select and use appropriate tools and techniques to generate, develop and format charts and graphs • Select and use appropriate page layout to present and print spreadsheet information
Autumn 2	Digital Literacy	Cyberbullying Online Grooming Sexting	<ul style="list-style-type: none"> • Pupils should understand a range of ways to use technology safely, respectfully, responsibly and securely, including protecting their online identity and privacy.
	Digital Literacy Information Technology	Introduction of cybersecurity Gifted & Talented potential to achieve: ICDL BCS L1 Presentation Software MS PowerPoint 2019 Cert UK Eng	<ul style="list-style-type: none"> • Discover about techniques used by cybercriminals to steal data, disrupt systems, and infiltrate networks • Consider the value of their data to organisations and what they might use it for • Look at social engineering techniques used by cybercriminals to try to trick users into giving away their personal data • Study common cybercrimes such as hacking, DDos attacks, and malware • Look at methods to protect ourselves and our networks against these attacks

	Theme	Topic	Knowledge
Spring 1	Computer Science	Python programming with sequences of data	<ul style="list-style-type: none"> Check/Recap pupils' ability to write Python programs that display messages, receive keyboard input, use simple arithmetic expressions, and control the flow of program execution through selection and iteration structures introduce how data can be represented and processed in sequences, such as lists and strings. <p>A range of pedagogical tools are used throughout the unit, with the most prominent being live coding, and worked examples</p>
	Digital Literacy	 UK Safer Internet Centre	<ul style="list-style-type: none"> Online Safety Week Update on latest online safety news
Spring 2	Computer Science Information Technology	Representations: going audiovisual	<ul style="list-style-type: none"> Check/Recap pupils' knowledge of how binary is used to represent text and numbers Check/Recap pupils' knowledge how binary is used to represent images manipulate images to understand how the underlying principles of digital representations are applied in real settings manipulate sounds to understand how the underlying principles of digital representations are applied in real settings

Digital Technology Curriculum: Year 9 Long Term Plan

	Theme	Topic	Knowledge
Summer 1	Information Technology	Data science Gifted & Talented potential to achieve: ICDL BCS L1 Word processing MS Word 2019 Cert UK Eng	<ul style="list-style-type: none"> • Know how to use data to investigate problems • Pupils are exposed to both global and local data sets • Gain an understanding of how visualising data can help with the process of identifying patterns and trends • Work through the steps of the investigative cycle to try to solve a problem in the school using data
Summer 2	Information Technology	Media – Animations	<ul style="list-style-type: none"> • Discover how professionals create 3D animations using the industry-standard software package, Blender. • Learn the basics of modelling, texturing, and animating • Outputs may include 3D models, short videos, and VR.