

Intent and short Overview for ICT

Subject	ICT					
Intent	<p>ICT (Information and communications technology) introduces students to the fundamentals of computer and digital communications technologies, discovering the varied roles and wider implications of computers and digital communications in the modern world. Studying ICT will allow students to attain better success in education, by giving students a comprehensive understanding of how computers work; how to use computer and communications technology responsibly and respectfully; and how students can make best use of computers in not just their own education but more broadly in their daily lives.</p> <p>The students will explore topics such as internet safety, internals of computers, and the legal, honest, and ethical use of computers and digital communication. Students will also develop their self-belief and confidence in using computers, and learn more practical skills such as using word processors, spreadsheets and safe internet browsing. Then moving on to more advanced topics such as digital design and graphics, editing digital audio and music, and programming. We will also be investigating additional topics such as artificial intelligence, and robotics, and how these two ever-evolving themes are changing how we live within the global community. We strive to prepare our students for the working world, and give them the knowledge, experience, motivation and skills they need to achieve in whatever career they choose to pursue.</p>					
Overview	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	Introduction to Computers and internet safety	Clear messaging in digital media	Programming using Scratch Part 1, Y7	Office applications (word processing, powerpoint presentation and spreadsheets)	Introduction to computer networks	Programming using Scratch Part 2, Y7
Year 8	Introduction to cybersecurity Y8	Layers of computing systems	Digital design and vector graphics Y8	Web development (HTML, CSS)	Mobile app design and development	Evolution of data representations
Year 9	Introduction to cybersecurity Y9	Layers of computing systems	Programming using Python Part 1, Y9	Data science (Statistics)	Digital design (vector & raster graphics, audio editing) Y9	Programming using Python Part 2, Y9

Year 10	Cybersecurity and data protection Y10	Online safety Y10	IT and the world of work Y10	Digital design (vector & raster graphics, audio editing) Y10	Practical skills- Office Applications (Word processing, powerpoint presentation, spreadsheets) Y10	Artificial Intelligence and Robotics Y102 (Using Micro:Bit kits)
Year 11	Cybersecurity and data protection Y10	Online safety Y11	IT and the world of work Y11	Introduction to digital design and vector graphics Y11	Practical skills- Office Applications (Word processing, spreadsheets) Y11	Artificial Intelligence and Robotics Y11