Year 6

Autumn 1	**Computing systems and networks** **Bletchley Park and the history of computers** Discovering the history of Bletchley Park, historical figures and the importance of code breaking and passwords. Designing a computer of the future and creating an audio advert for their designs.	**Autumn 2**	**Programming** **AI** Exploring what AI is and how it generates text, images and code. Learning about creating and refining prompts to improve AI responses while also considering the ethical implications of AI and its potential to replace human roles.
Spring 1	**Data handling** **Big data 1** Identifying how barcodes and QR codes work. Learning how infrared waves are used for the transmission of data while recognising the uses of RFID.	**Spring 2**	**Creating media** **Intro to Python** Using the programming language 'Python' to create designs and art. Learning how to create loops and nested loops to make their code more efficient.
Summer 1	**Data handling** **Big data 2** Further developing understanding of how networks and the Internet are able to share information. Learning how big data can be used to design smart buildings.	**Summer 2**	**Skills showcase** **Inventing a product** Designing a product, pupils: evaluate, adapt and debug code to make it suitable for their needs and designing products in CAD and creating a website and video.
Online safety	**Online safety** **Online safety Y6** Learning to deal with issues online; about the impact and consequences of sharing information online; how to develop a positive online reputation; combating and dealing with online bullying and protective passwords.		