

Year 7 Computing

| Link to NC | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
|------------------------------------|--|---|--|---|---|--|
| Content | E-Safety | Block coding - Code.org | Data representation | Sound manipulation | Graphics | Computational thinking |
| Knowledge & Skills | Develop an understanding of the nature of online threats and an ability to recognise and implement preventative measures. | Use of a block based programming language, to solve a variety of computational problems | Understand how numbers can be represented in binary. Understand simple Boolean logic. | Record, Edit, and Combine Sounds and sound files. Create and use sound fit for a specific purpose. | Develop an understanding of the processes utilised in the creation of digital graphics. | Understand the concepts of computational thinking, able to recognise and use logic gates and truth tables. |
| Key Questions | What are the elements of responsible digital citizenship? | What are the constructs that underpin all programming code? | How do computers store and manipulate data? | How are analogue sound waves converted into digital sounds? | What is pre-production and why is it used? | How can we use decomposition to solve large problems? |
| Assessment | Low stakes/POP tests and both written and online end-of-unit tests. | | | | | |
| Literacy/numeracy/S MSC/Character | Literacy is incorporated into the schemes of work specifically where students are required to analyse, plan and review their digital creations. Students will engage with and question their own work and that of their peers, they will identify how beliefs and values can influence the design of digital products. | | | | | |
| Enrichment opportunities & futures | Code club which runs once per week. Students participate in the iDEA program of skills and badges. Opportunities to enter Bebras UK challenges: https://www.bebras.uk/ | | | | | |