Computing Key Stage 3

All pupils receive one dedicated computing lesson a week.

Year 7 content

Autumn Term
• Scratch *Building on programming skills previously learnt in key stage 2* • Binary and Python *Developing computing knowledge about Binary and introduction to programming language Python*
Spring Term
• Spreadsheet skills *Building on spreadsheet skills previously learnt in key stage 2, looking at formula and charts* • Micro Bits *Programming the Micro bits – investigating a variety of different programming techniques*
Summer Term
• Micro Bits *Programming the Micro bits – investigating a variety of different programming techniques* • Digital Media *Developing a digital media product to promote online safety.*

Year 8 content

Autumn Term
• Binary, Hexadecimal and Python *Developing computing knowledge about Binary, Hexadecimal and building of previous learning of Python programming language* • Flowol *Developing knowledge about algorithms and investigating flowcharts, the symbols used and creating flowcharts for different scenarios.*
Spring Term
• Micro Bits *Programming the Micro bits – investigating a variety of different programming techniques* • Computing past, present and future *Develop an understanding about the history of computing, how it has developed today and how it is developing into the future.*

Summer Term
• Website Creation (HTML) *Developing website creation skills. Pupils will create a website for a specific scenario thinking about target audience*

Year 9 content

Autumn Term
• Python *Developing python programming knowledge and skills. Building on previous knowledge learnt in year 8* • Computing Components & Ethics *Develop an understanding as to how computers work and investigating the components within a computer. Looking at the ethics of computing investigate a range of morale dilemma's surrounding computing*
Spring Term
• Computational Thinking *Developing an understanding about thinking like an electronic device and understanding how they work. Learning about flowcharts and pseudocode* • Computing past, present and future *Develop an understanding about the history of computing, how it has developed today and how it is developing into the future.*
Summer Term
• Sound and Video Editing *Using video and audio software to edit and create sound effects and edit videos for a specific audience*

Approaches to Teaching and Learning within Computing.

The department builds on improving the pupil's computing skills by using a variety of different teaching and learning methods:

- Peer and self – assessment.
- Verbal and written feedback.
- Teacher and pupil skills demonstrations.
- Risk – taking when using a variety of different programming languages.
- Collaborative learning activities