

Sequence of Topics for KS3

Computing KS3 – Year 7

The students will be introduced to the IT skills they will need to support other subjects across the curriculum and will be introduced to programming, algorithms, some more complex elements of software packages and an understanding of computer hardware and how it works.

- An introduction to KES Systems including Teams, OneDrive, Email, word, hardware and inputs/outputs
- Touch Typing 1 lesson and at home using Typdojo
- Binary – pupils will be able to convert binary to denary and add two binary numbers, hexadecimal, ascii and character sets
- Introduction to computer hardware and students are be able to name and describe the components within a PC.
- Covering the basics around passwords and social media as part of the e-safety agenda - E-safety
- Artificial intelligence
- Introduction to databases – students are taught to setup a structure, enter data and interrogate the data.
- Introduction to scratch block programming, preparing them for using python in Year 8.
- Photoshop – developing simple image manipulation skills

Computing - Year 8

Throughout Year 8 students will continue to study IT/Computing and build upon the skills they have been introduced to in Year 7. This year is used to develop more programming skills, including the introduction of textual programming.

- Continue with scratch and students make a game with a specific criterion
- Turing Tumble – students learn how to solve problems computationally, with the use of debugging.
- Careers
- E-safety, specifically Tiktok, Online grooming and Brek Bednar
- Microbit Projects - Students will be introduced to using python programming language. They are introduced to programming basics and then will develop these skills to create bespoke projects using the Microbit technologies.
- Creating an app
- Networks
- Photoshop

Computing Year 9

There will be a deeper focus on programming skills and a look at some of the GCSE theory to give the students a good insight into the GCSE Computer Science and preparation for B-Tec DIT syllabuses.

- Cybersecurity
- Photoshop creating a logo
- Careers in computer science
- Creating an app using Appshed using their logo created in photoshop.
- Spreadsheet Modelling – Students will complete a series of lessons looking at the basic and more complex functions of spreadsheet modelling.
- HTML – web page creation

- Python – pygame