**Year 7 curriculum:**

**Computer Science**

**Autumn Term/Spring Term**

**Topic 1: Scratch**- Fundamental principles of programming and learn how to build programs using block coding.

**Spring Term/Summer Term**

**Topic 2: Flowol**- You will develop your problem-solving abilities using Flowcharts and algorithms that represent real world scenarios.

**Digital literacy**

**Rotation 8 weeks**

**E-Safety**-Use the equipment at school safely Identify cyberbullying and Computer threats and learn how to deal with it.

**Spreadsheets**-How use a spreadsheet tools and construct formulas for specific purposes. Learn how to manage income and expenditure in a business.

**Year 8 curriculum:**

**Computer Science**

**Autumn Term**

**Python Programming**- Basics of programming code in python. - Specifically looking at Selection, Sequence, and Iteration in a deeper and different contexts to apply a range of scenarios.

**Autumn Term /Spring Term**

**Audacity** – using, a multi-track editor and recording tool to develop and edit sounds and music.  
**Spring Term/Summer Term**

**Hardware and software**– Parts of the computer system and how they work with the computer.

**Digital literacy**

**Rotation 8 weeks**

**Online safety –**staying safe onlineand what to do and not do when it comes to technology.

**Year 9 curriculum:**

**Autumn Term**

**Python, Pseudocode and Algorithms**– You will build on your programming skills developed in Year 7 and 8 in programming units.

**Autumn Term /Spring Term**

**Photo editing**– You will recap on hardware and software from year 8, by looking more deeply into components of the CPU, and how they affect the computer system.

**Spring Term/Summer Term  
Data representation** – How data is represented in a computer system. In particular, they will look at how a computer is able to store so much information (images, sound, text) using binary.

**Digital literacy**

**Rotation 8 weeks**

**Online safety –**staying safe onlineand what to do and not do when it comes to technology.

**Idea award** - The Inspiring Digital Enterprise Award, known as iDEA, is an international award-winning programme that helps you develop and demonstrate your digital, enterprise and employability.

**Spreadsheets**-How use a spreadsheet tools and construct formulas for specific purposes. Learn how to manage income and expenditure in a business.

**Spring Term**

File handling  
Embedded systems  
Storage  
Writing pseudocode/flowcharts

**Summer term**Functions  
Data storage  
Random numbers  
Networks and topologies  
Searching and sorting algorithms  
Networks, protocols and layers

Year 11

**Autumn term**SQL and database  
Identify syntax and logic errors  
Mock revision

**Spring Term**

Languages & IDE

Mock revision