CURRICULUM INFORMATION

Computer Science

Computer Science Key stage 3:

At Key stage 3 students will be introduced to a wide range of computational thinking and encouraged to develop their creativity to understand our changing world of technology. Computer Science has links with mathematics, science, and design and technology of will be experienced through a range of exciting starting points. The basis of this curriculum is to develop our students so that they become digitally literate – able to use, and express themselves and develop their ideas through, information and communication technology.

Computer Science Key stage 3 learning theme:

LP	Year 7	Year 8	Year 9
1	E Safety	Advanced Flowol	Python programming
2	Image manipulation	Python programming	Data representation 1
3	Flowol	Revenge of the vampires	Data Representation 2
4	FMSLogo	Excel	Computer fundamentals
5	Scratch basics	Encryption of data	Computer fundamentals
6	Scratch development	Scratch theme park	Cyber security

Computer Science Key stage 3 Homework:

LP	Year 7	Year 8	Year 9
1	Safety online	Flowol -sequencing	Python programming language
2	Key terms graphics	Python Programming coding	Data basic
3	Flowol - flowcharts	Key terms graphics	Data advanced
4	FMSLogo	Excel tools	Storage and processes
5	Scratch key terms	Data	Software

6	Scratch terminology/process	Scratch terminology	Security online

Computer science Key stage 4:

Students selecting a GCSE in Computer Science will be encouraged to develop their creativity and practical problem solving. Students will develop their understanding and application of the core concepts in computer science. Students also analyse problems in computational terms and devise creative solutions by designing, writing, testing and evaluating programs.

Computer Science Key stage 4 learning theme:

LP	Year 10	Year 11
1	CPU	Programming techniques
2	Networks	NEA – Coursework
3	Cyber Security	NEA – Coursework
4	System software and ethics	Revision techniques/revisit themes
5	Data representation	Revision techniques/revisit themes
6	Algorithms	Examination period

Computer Science Key stage 4 Homework:

LP	Year 10	Year 11
1	CPU	Programming techniques
2	Networks	Personalised revision
3	Cyber Security	Personalised revision
4	System software and ethics	Revision techniques/revisit themes
5	Data representation	Revision techniques/revisit themes
6	Algorithms	Examination period

Creative I media Key Stage 4:

Building on the skills and understanding from Key stage 3 students will develop and explore how and why digital graphics are used and the techniques that are involved in their creation. They apply their skills and knowledge in creating digital graphics against a specific brief and also introduced to a range of essential pre-production techniques used in the creative and digital media, including client brief, time frames, deadlines and preparation techniques.

Key stage 4: Creative I media learning theme

LP	Year 10
1	Creating digital graphics
2	Creating digital graphics
3	Creating a multipage website
4	Creating a multipage website
5	Creating a multipage website
6	Designing a game concept

Key stage 4: Creative I media Homework:

LP	Year 10
1	Key terminology linked to unit 1
2	Key terminology linked to unit 1
3	Key terminology linked to unit 2
4	Key terminology linked to unit 2
5	Key terminology linked to unit 2
6	Key terminology linked to unit 3