Computing Curriculum Plan

KS3

	Year 7	Year 8	Year 9
Autumn 1	**Introduction to network** Login and introduction to network Email Go4schools Acceptable Use Policy Access to cloud and online school resources Baseline test (Assessment 1) E-safety – Create poster Research skills	**Working practices** E-safety, get familiar with any changes to school systems **Spreadsheets** Cell referencing Formatting Sorting Formulas Functions Charts	**Working practices** E-safety, get familiar with any changes to school systems **Spreadsheets** Cover the content of the European Computing Driving Licence (ECDL) *(Assessment 1)*
Autumn 2	**Bebras computational thinking challenge** (*Assessment 2)* **History of computing** Research, create, plan and evaluate a presentation on the history of computing presentation (*Assessment 3*)	**Exam** *(Assessment 1)* **Bebras computational thinking challenge** (*Assessment 2)* **Databases** Data types, characteristics of database tables, simple SQL queries	**Bebras computational thinking challenge** (*Assessment 2)* **Python programming** Review topics covered in year 8 and cover iteration and apply techniques to solving problems
Spring 1	**Hardware and Software** Includes Inputs, processing and Outputs Create a brochure using desk top publishing (*Assessment 4*)	**Python programming** Input, output, assignment and variables, operators and selection	**Algorithms and data representation** *(Assessment 3*) Binary-denary conversion Character coding Bitmap graphics Vector graphics Sound Fetch execute cycle Boolean logic gates Searching algorithms Sorting algorithms
Spring 2	**Sequencing** Use Flowol to create flowcharts for control various systems from traffic lights to more complex control systems	**Animation** Create 2D animations and use techniques such as layering, shape and motion tweening	**Mobile phone app development** Create a mobile phone app that has revision resources
Summer 1	**Logo Programming** Draw shapes by programming a turtle to introduce some of the basic concepts of coding including sequencing and iteration. (Assessment 5)	**Websites** Creating websites using HTML and CSS *(Assessment 3)*	**BYOB** Design and create a game in BYOB **Product launch using multimedia** –images - poster Film advert
Summer 2	**Block based coding in Scratch** Continue to develop coding and introducing additional concepts like assignment, selection and concurrency.	**Advertising campaign using multimedia** Pupils can use a variety of multimedia to advertise a product – making a radio advert	

KS4

	Year 10 GCSE	Year 10 iMedia	Year 10 Core	Year 11 GCSE	Year 11 iMedia	Year 11 Core
Autumn 1	**Data Representation** Binary, Hexadecimal, ASCII **Coding** Input, output, variables, selection	**Preproduction skills topics (Exam)** Moodboards, Spider and Visualisation diagrams, Storyboards, Scripts Interpret client requirements, Identify timescales, Carry out primary and secondary research	**Digital literacy** Completion of idea bronze award https://idea.org.uk **Computational thinking** Metacognition **IT** Office and collaboration apps across all subjects **E-safety** E-safety and cybersecurity through assemblies	**Cybersecurity** **Coding**	**Creating Interactive Multimedia Products** Where different interactive multimedia products are used Required hardware File formats Limitations Key elements	**Digital literacy** Completion of idea bronze award https://idea.org.uk **Computational thinking** Metacognition **IT** Office and collaboration apps across all subjects **E-safety** E-safety and cybersecurity through assemblies
Autumn 2	**Data Representation** Images Sound Compression **Coding** Iteration	**Preproduction skills topics** Produce a work plan Identify Target audience, Hardware, techniques and software, Health and safety legislation		**Networking** Wireless Wired LAN, WAN, PAN **Coding**	**Creating Interactive Multimedia Products**	
Spring 1	**Databases** **Coding** Functions Lists Radom	**Preproduction skills topics** Understand different file formats, Review pre-production documents, mIdentify areas for improvement in a - preproduction document		**IT in society** Legal issues **Coding**	**Design Game Concept** The Evolution of gaming platforms Compare capabilities and limitations of platforms	
Spring 2	**Databases** **Coding** Reading and writing files	**Creating Digital Graphics** Why digital graphics are used, How digital graphics are used, Types of digital graphics, File formats Properties of digital graphics		**Contingency/ Revision**	**Design Game Concept**	
Summer 1	**Computer Systems** Hardware Software Boolean **Coding**					
Summer 2	**Computer Systems** Fetch-execute-Cycle **Coding**					