Curriculum Area - IT

Overview 2021/22

The skills and knowledge being taught in each half term for each year group.

	HT1	HT2	HT3	HT4	HT5	HT6
Year 7	This is the first unit of work which students will complete in Y7. It is based around understanding how to use a computer safely. Students are also introduced to One Drive and how it is used to save work /how to work from. This will ensure home learning can take place with confidence. Students also look a range of different software packages and how to use them for certain tasks. They also cover the basic principles of using a computer safely.	This unit look looks at the devices/ components which make up a computer system. There is a section on peripheral devices, internal\ external devices which make up a range of computer systems from PC / Games consoles/ EPOS systems.	This unit introduces the students to computational thinking and the main 4 corner stones. They develop transferable skills on the key corner stones of computational thinking which include: • Decomposition • Pattern recognition • Abstractions • Algorithm design This unit gives students the skill set to approach any problem/ task in a meaningful way.	Once of the elements of computation thinking which students covered last term was algorithms. This unit will look deeper into algorithms and the main features of 2 different types of algorithms: • Pseudo code • Flowcharts	Student study scratch (graphical programming language) and understand the main purpose of the software. It is an introduction to simple programming.	This unit is based around data. We look at how data is used and processed. This ensures students are aware of how to keep data safe and which software packages are used for handling data.
	HT1	HT2	HT3	HT4	HT5	HT6
Year 8	Students look at the basic	Students look at how data is	This unit of work is based around	This is the next stage of the digital	This unit students will start to create	This unit of work will be based upon

	components which make up computer system architecture. They look at the components which are involved and how they come together to perform tasks for the user.	represented within a computer system. They look at the concept of binary and understand why everything which is within a computer system must be converted to binary.	completing a range of different planning documentation in preparation for creating a digital project.	project where students take the planning documents which they have created in HT3 and start to design the project outline, content creation and review of designs.	their final product based on the planning documents and feedback from their peers.	the client brief changing from the one which was given to students at the start of HT3. They will have to discuss the best way to change and amend the digital project completed in HT5 to meet the target audience and new client brief.
	HT1	HT2	HT3	HT4	HT5	HT6
Year 9	This topic is based around the main features of Boolean logic and the gates which are used. By the end of the unit students will understand what Boolean logic is and why it is important within a computer system.	This topic is based around the main features of Boolean logic and the gates which are used. By the end of the unit students will understand what Boolean logic is and why it is important within a computer system.	This is a continuation of the algorithm topic which was started in HT4 in Y7. Students recap the basic concepts of algorithms and now look at the sorting and searching features which algorithms can be used for and why they are used.	E safety topic based around social media and online profiles/ footprints.	This topic is based around creating a promotional banner for a specific design brief.	This topic will be a present, review and evaluate project when students will have the chance to present their promotional banner to their peers, get feedback, evaluate and improve overall design.