





The curriculum for this stage of students' education has been designed to introduce students to computer systems, how they work and their uses, both for personal and business use specifically web pages and spreadsheet modelling. The content of the specification has been followed to ensure that students have the required knowledge base whilst introducing the concept and skill of applying the use of IT systems. This builds on prior learning at Key Stage 3 in terms of the use of IT in everyday life, online safety and how individuals use IT. In KS5 students move on to study specific software applications and this year's work gives students an understanding of how and why businesses use IT before they put this into practical use in Y13. Students are encouraged to support their learning with regular background reading in relation to advances in technology and legal, moral and ethical issues surrounding the use of IT.

<p>HALF TERM 1: Component 1 Strand A</p> <p>STUDENTS MUST KNOW:</p> <ul style="list-style-type: none"> Investigate interface design for individuals & organisations Learners will investigate different types of user interface used by individuals and organisations. They will investigate how they vary across different uses, devices and purposes. Learners will investigate the varying needs of the audience and how they affect both the type and the design of the interface. Learners will investigate a wide variety of design principles that provides both appropriate and effective user interaction with hardware devices. Learners will investigate techniques that can be used to improve both the speed and access to user interfaces. <p>HOW THIS WILL BE ASSESSED:Assessment will be completed at the end of this Unit by way of a written report.</p>	<p>HALF TERM 2: Component 1 Strand B</p> <p>STUDENTS MUST KNOW:</p> <ul style="list-style-type: none"> Project planning techniques Learners will investigate different planning tools and design methodologies that can be used to plan, monitor and execute projects. Learners will select suitable project planning techniques to develop a project plan for the development of a user interface for a given brief. Learners will create an initial design using the design principles covered. <p>HOW THIS WILL BE ASSESSED:Assessment will be completed at the end of this topic with a combination of evidence including fully analysed primary and secondary research; GANTT charts and mood boards.</p>	<p>HALF TERM 3: Component 1 Strand B</p> <p>STUDENTS MUST KNOW:</p> <ul style="list-style-type: none"> Project planning techniques Learners will investigate different planning tools and design methodologies that can be used to plan, monitor and execute projects. Learners will select suitable project planning techniques to develop a project plan for the development of a user interface for a given brief. Learners will create an initial design using the design principles covered. <p>HOW THIS WILL BE ASSESSED:Assessment will be completed at the end of this topic with a combination of evidence including fully analysed primary and secondary research; GANTT charts and mood boards.</p>
<p>HALF TERM 4: Component 1 Strand C</p> <p>STUDENTS MUST KNOW:</p> <ul style="list-style-type: none"> Learners will use their design to produce a user interface. Learners will refine their user interface using an iterative process with potential users. Learners will review the success of the user interface and the use of their chosen project planning techniques. <p>HOW THIS WILL BE ASSESSED:A user interface supported by a written document detailing it's strengths and weaknesses alongside their own skills and areas needed for further development.</p>	<p>HALF TERM 5: Component 2 Strand A</p> <p>STUDENTS MUST KNOW:</p> <ul style="list-style-type: none"> Learners will understand the concepts of data, that data is meaningless without converting it into information, adding structure and context. Learners will understand the different ways of representing information, be able to explain situations it would be used. Learners will understand the methods that can be used to ensure data input is suitable and within boundaries so that it is ready to be processed. Learners will understand how the data collection method and data collection features affect its reliability. Learners will understand the different threats that face individuals who have data stored about them. <p>HOW THIS WILL BE ASSESSED:Assessment will be completed at the end of this Unit by way of a written report.</p>	<p>HALF TERM 6: Component 2 Strand B</p> <p>STUDENTS MUST KNOW:</p> <ul style="list-style-type: none"> Learners will understand how data can be imported from an external source. They will then explore how to apply data processing methods. Learners will use a dashboard to select and display information summaries based on a given large data set. <p>HOW THIS WILL BE ASSESSED:</p> <ul style="list-style-type: none"> A spreadsheet showing the imported dataset, the data manipulation methods used and a completed dashboard A written document containing screenshots that show the manipulation methods used and a completed dashboard Annotated screenshots of the completed dashboard and dataset, outlining the choice of presentation features and the data manipulation tools used A printout of the final dashboard created.



Embedding this knowledge can be supported by cross curricular experiences as well as developing computational thinking skills by use of programs such as Serif WebPlus and Microsoft Excel. Using the Micro-bit or getting a Raspberry Pi will also help develop programming skills and computational thinking.



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A user interface supported by a written document detailing it's strengths and weaknesses alongside their own skills and areas needed for further development.

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- Learners will understand the different threats that face individuals who have data stored about them.
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HOW THIS WILL BE ASSESSED:

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- A written document containing screenshots that show the manipulation methods used and a completed dashboard
- Annotated screenshots of the completed dashboard and dataset, outlining the choice of presentation features and the data manipulation tools used
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