

## Year 10 BTEC DIT Sequence

Year	Content Taught	Reference	Essential Knowledge	Assessment	Rationale
<b>Year 10 BTEC DIT</b>					
KS4  HT1	In this half term students will study a topic focused on:  <b>Exploring User Interface Design -</b>	<b>Component 1</b> Investigate user interface design for individuals and organisations  Use project planning techniques to plan and design a user interface	Types of interfaces e.g. <ul style="list-style-type: none"> <li>• GUI, Design Principles</li> <li>• Planning Tools, Methodologies, Design essential knowledge, Gantt charts etc</li> </ul> Draws on essential knowledge learned in KS3  <b>Essential Knowledge Reading (To provide breadth)</b>  <b>Focus:</b> Gantt Charts <b>Link:</b> <a href="https://www.teamgantt.com/what-is-a-gantt-chart">https://www.teamgantt.com/what-is-a-gantt-chart</a>	<b>Formative</b> Students will complete retrieval exercises each lesson to review and recall knowledge from previous lessons and apply this knowledge to alternate scenarios to deepen understanding.  <b>Summative</b> Students will complete a Teams based KO Test to summarise content.  Within this half term students will develop essential knowledge in lessons and ‘bring it all together’, by completing an ICT based “design and create” practice coursework element to inform students of the essential skills	This Essential Knowledge also builds on knowledge gained in KS3. The digital sector is a major source of employment in the UK, with 1.46 million people working in digital companies and around 45,000 digital jobs advertised at any one time. Digital essential knowledge span all industries; almost all jobs in the UK today require employees to have a good level of digital literacy. The UK has positioned itself to be the ‘digital capital of Europe’ as it continues to invest billions every year in digital essential knowledge and commerce.

				required to complete the actual coursework.	Knowledge that underpins effective use of essential knowledge, process and attitudes in the sector such as how different user interfaces meet user needs, how organisations collect and use data to make decisions, virtual workplaces, cyber security and legal and ethical issues.
<b>HT2/3</b>	In this half term students will study a topic focused on:  <b>Exploring User Interface Design</b>	<b>Component 1</b> Use project planning techniques to plan and design a user interface	Planning Tools, Methodologies, Design essential knowledge eg Waterfall Methodology, Agile etc  <b>Essential Knowledge Reading (To provide breadth)</b>  <b>Focus:</b> Waterfall and Agile <b>Link:</b> <a href="https://www.forbes.com/advisor/business/agile-vs-waterfall-methodology/">https://www.forbes.com/advisor/business/agile-vs-waterfall-methodology/</a>	<b>Formative</b> Students will complete retrieval exercises each lesson to review and recall knowledge from previous lessons and apply this knowledge to alternate scenarios to deepen understanding.  <b>Summative</b> Students will complete a Teams based KO Test to summarise content.  Within this half term students will use the developed essential knowledge in lessons and ‘bring it all together’, by completing the ICT based “design and create” coursework element.	<b>Exploring User Interface Design</b> This builds on Key Stage 3 where students have learned about computer systems and software applications so students will learn how effective design and planning has a major impact on the user experience. As digital technologies and organisations continue to evolve, each new development offers new and exciting ways of completing tasks and interacting with our hardware devices. Each new development opens up a new project with a new set of user requirements that needs to be solved. Students will learn different project planning
<b>HT4</b>	In this half term students will study a topic focused on:  <b>Exploring User Interface Design</b>	<b>Component 1 –</b> Develop and review a user interface	Practical essential knowledge to create a GUI  Draws on essential knowledge learned in KS3	<b>Formative</b> Students will complete retrieval exercises each lesson to review and recall knowledge from previous lessons and apply this knowledge to alternate	

			<p><b>Essential Knowledge Reading (For greater depth)</b></p> <p><b>Focus:</b> GUIs <b>Link:</b> <a href="https://www.computerhope.com/jargon/g/gui.htm">https://www.computerhope.com/jargon/g/gui.htm</a></p>	<p>scenarios to deepen understanding.</p> <p><b>Summative</b> Students will complete a Teams based KO Test to summarise content.</p> <p>Within this half term students will use the developed essential knowledge in lessons and ‘bring it all together’, by completing the ICT based “design and create” coursework element.</p>	<p>techniques that can be used to both plan and deliver a project that meets a set of user requirements. This will help students with topics covered in KS5 Computing and CTEC IT.</p>
<b>HT5</b>	<p>In this half term students will study a topic focused on:</p> <p><b>Collecting, Presenting and Interpreting Data</b></p>	<p><b>Component 2:</b> Investigate the role and impact of using data on individuals and organisations</p> <p>Create a dashboard using data manipulation tools</p>	<p>Characteristics of data</p> <p>Draws on essential knowledge learned in KS3</p> <p><b>Essential Knowledge Reading (To consolidate)</b></p> <p><b>Focus:</b> Data Dashboard <b>Link:</b> <a href="https://www.klipfolio.com/blog/what-is-a-data-dashboard">https://www.klipfolio.com/blog/what-is-a-data-dashboard</a></p>	<p><b>Formative</b> Students will complete retrieval exercises each lesson to review and recall knowledge from previous lessons and apply this knowledge to alternate scenarios to deepen understanding.</p> <p><b>Summative</b> Students will complete a Teams based KO Test to summarise content.</p> <p>Within this half term students will develop essential knowledge in lessons and</p>	<p><b>Collecting, Presenting and Interpreting Data</b></p> <p>This builds on Key Stage 3, where students have learned about how to create programs and will help to develop understanding of how to represent information in different ways to give it more meaning. Students will understand the characteristics of data and information and how they help organisations in decision making. They will use data manipulation methods to create a</p>

				<p>'bring it all together', by completing an ICT based "design and create" practice coursework element to inform students of the essential skills required to complete the actual coursework.</p>	<p>dashboard to present and draw conclusions from information. This will help students with topics covered in KS5 Computing and CTEC IT.</p> <p><b>Sequence and Progression:</b></p>
HT6	<p>In this half term students will study a topic focused on:</p> <p><b>Collecting, Presenting and Interpreting Data</b></p>	<p><b>Component 2:</b> Create a dashboard using data manipulation tools</p> <p>Draw conclusions and review data presentation methods</p>	<p>Practical Essential knowledge to create a Data Dashboard.</p> <p>Formatting, sum, formulas, spinners, Conditional formatting, VLOOKUP, list box, if statements etc</p> <p>Draws on essential knowledge learned in KS3</p> <p>Interpret information and draw conclusions</p> <p><b>Essential Knowledge Reading (To consolidate)</b></p> <p><b>Focus:</b> Formulas <b>Link:</b> <a href="http://implilearn.com/tutorials/excel-tutorial/excel-formulas#:~:text=toolsExplore%20Program-,What%20is%20Excel%20Formula%3F,subtraction%2C%2">implilearn.com/tutorials/excel-tutorial/excel-formulas#:~:text=toolsExplore%20Program-,What%20is%20Excel%20Formula%3F,subtraction%2C%2</a></p>	<p><b>Formative</b> Students will complete retrieval exercises each lesson to review and recall knowledge from previous lessons and apply this knowledge to alternate scenarios to deepen understanding.</p> <p><b>Summative</b> Students will complete a Teams based KO Test to summarise content.</p> <p>Within this half term students will use the developed essential knowledge in lessons and 'bring it all together', by completing the ICT based "design and create" coursework element.</p>	<p><b>Component 2 data Dashboard</b> in Yr10 is linked to Data Dashboard in Yr11.</p> <p><b>Cross Curricular Knowledge Connections</b> with Maths in Yr10 Statistics, equations and Yr11 Maths graphs and equations.</p>

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<b>HT6</b>	<p>In this half term students will study a topic focused on:</p> <p><b>Collecting, Presenting and Interpreting Data</b></p> <p>-</p>	<p><b>Component 2:</b> Draw conclusions and review data presentation methods</p>	<p>Interpret information and draw conclusions</p> <p><b>Essential Knowledge Reading (For greater Depth)</b></p> <p><b>Focus:</b> Review/Conclusions from Data</p> <p><b>Link:</b> <a href="https://www.engineess.io/insights/how-to-better-draw-insights-from-data">https://www.engineess.io/insights/how-to-better-draw-insights-from-data</a></p>	<p><b>Formative</b> Students will complete retrieval exercises each lesson to review and recall knowledge from previous lessons and apply this knowledge to alternate scenarios to deepen understanding.</p> <p><b>Summative</b> Students will complete a Teams based KO Test to summarise content.</p> <p>Within this half term students will develop essential knowledge in lessons and ‘bring it all together’, by completing an ICT based “design and create” practice coursework element to inform students of the essential skills required to complete the actual coursework.</p>