

Computing & IT - Curriculum Mapping

Vision: We are living in the digital age, in Computer Science we give students the opportunity to be a part of the digital revolution.

Skill	Logo	Year 7	Year 8	Year 9 Core	Year 9 IT	Year 9 Computing	Link to GCSE/BTEC/NC
Spreadsheets, Databases & Applications		<p>Unit: Unit 3 Harry Potter Assessment: Project demonstrating basic formatting and formulae skills within a multiple workbook spreadsheet</p> <p>Unit: Unit 5 Word Processing Assessment: End of unit Project demonstrating the skills to use essential tools with a word processing package</p>	<p>Unit: Unit 4 Spreadsheet Quizzes Assessment: Project demonstrating advanced formatting, conditional formatting and advanced formulae which builds upon the skills learnt during year 7</p> <p>Unit: Unit 5 Databases Assessment: Project demonstrating the skills needed to use and manipulate a relational database. Covers searching, sorting and database key terminology & knowledge</p>	<p>Unit: Unit 3 Garden Design Assessment: End of unit Project demonstrating the ability to use graphic editing software package to edit and layer multiple bitmap images</p>	<p>Unit: Unit 1 Designing an Interface Assessment: This is to prepare students for Unit 1 BTEC. They design and create a user interface using PPT to a given brief.</p> <p>Unit: Unit 2 Spreadsheets Assessment: Students build on their skills to create a spreadsheet solution for a given brief</p>	There are no dedicated units to spreadsheets or database skills in year 9 Computer Science as they are not required for the GCSE Course however throughout units 2 and 3 students use word processing, presentation and online applications to present their project work	<p>BTEC IT L2 - Unit 2 Spreadsheets</p> <p>BTEC IT L3 – Unit 2 Databases</p>
Graphics & Websites		<p>Unit: Unit 6 Movie Trailers Assessment: End of unit Project demonstrating video editing techniques layering images, text and audio and then compression of multiple multimedia elements into one file</p>	<p>Unit: Unit 6 Website Building Assessment: Demonstrate the knowledge of how the internet works and website design and have the skills to use web building software to create a multi-page website that include a variety of appropriate media</p>	<p>Unit: Unit 5 Graphics Assessment: Demonstrate the knowledge of graphic types and show the skills needed to create both bitmap and vector images</p> <p>Unit: Unit 2 Out & Up Assessment: Demonstrate the knowledge of website design and have the skills to design a website for a given client brief</p>	<p>Unit 1: Designing an interface Assessment: Students create a range of graphics for different purposes using graphic editing packages</p> <p>Unit 1: Designing an interface Assessment: Students design and create a website for a given brief using graphics designed in the previous unit.</p>	There are no dedicated units to Graphics skills in year 9 Computer Science as they are not required for the GCSE Course and are covered in depth during Year 9 Core IT lessons during units 2 and 5	<p>BTEC L2 IT - Unit 1 user interfaces</p> <p>BTEC L3 IT – Unit 6 Websites</p> <p>National Curriculum requirements</p>
E-Safety		<p>Unit: Unit 2 Are you safe? Assessment: Project demonstrating understanding of Cyber Bullying, Social Engineering and Malware. Also links to graphics section as evidence of understanding is presented using desktop publishing software</p>	There are no dedicated units to E-Safety during year 8 Core IT due to curriculum time restrictions however there is a whole school internet safety week where students learn about issues surrounding being safe online	<p>Unit: Unit 1 What are you sharing? Assessment: Showing the understanding of more grown up E-Safety topics developing on issues learnt about in year 7 such as grooming and sexting</p>	There are no specific units or lessons dedicated to E-Safety during year 9 BTEC IT because this is covered during their year 9 Core IT lessons during unit 1 – What are you sharing?	There are no specific units or lessons dedicated to E-Safety during year 9 computer science because this is covered during their year 9 Core IT lessons during unit 1 – What are you sharing?	<p>National Curriculum requirements</p> <p>GCSE Computer Science - Unit 1 Security</p>
Logic, Algorithms & Programming		<p>Unit: Unit 4 Logic Assessment: Student evidence of completing the logic tasks and to what level they managed to achieve. The tasks include assisted block building logic and programming tasks that concentrate on logical thinking and problem solving</p>	<p>Unit: Unit 1 Scratch Assessment: Student evidence of Project completed using beginner programming skills in Scratch. This builds on the logic unit in year 7 but this time students must work with more independence creating their own programs using Blockly style programming</p>	<p>Unit: Unit 6 Advanced Logic Assessment: Student evidence of completing the advanced logic tasks and to what level. Building on what was learnt in year 7 and 8 to a more advanced level including text based programming</p>	There are no dedicated units to Logic or Algorithms in year 9 BTEC IT as they are not required for the BTEC Course and they are covered during Core year 9 IT in unit 6 Advanced Logic	<p>Unit: Unit 1 Programming Assessment: Student evidence and a final project demonstrating advanced and thorough development of text based programming skills in Python</p> <p>Unit: Unit 2 Algorithms Assessment: Student project demonstrating the understanding and ability to solve problems using both Pseudocode and Flowchart Algorithms</p>	<p>GCSE Computer Science - Exam 2 - Unit 1 Algorithms</p> <p>GCSE Computer Science - Exam 2 - Unit 2 Logic & Languages</p> <p>National Curriculum requirements</p>
Computer Science (Hardware, Software, Security, Networking & Data)		<p>Unit: Unit 2 Are you safe? Assessment: Project demonstrating understanding of Cyber Bullying, Social Engineering and Malware. Mainly links to security section as there are two lessons dedicated to different types of malware and different social engineering techniques</p>	<p>Unit: Unit 2 Understanding Computers Assessment: Paper based test to demonstrate understanding of different hardware components that make up a computer</p> <p>Unit: Unit 3 Computer Science Assessment: Test to demonstrate understanding of networks, Binary, logic gates and Python text based programming which builds on the knowledge gained in the unit 4 in year 7.</p>	<p>Unit: Unit 6 Advanced Logic Assessment: Student evidence of completing the advanced logic tasks and to what level. Building on what was learnt in year 7 and 8 to a more advanced level including text based programming</p>	There are no dedicated units to Computer Science topics in year 9 BTEC IT as they are not required for the BTEC IT Course	<p>Unit: Unit 3 Build a PC Assessment: Student project demonstrating the knowledge of different computer components and the ability to physically build a computer using 10 different components</p> <p>Unit: Unit 4 Binary & Hex Assessment: Paper based exam assessing the understanding of how computers use binary and demonstrating the ability to convert between Hexadecimal, Binary and Denary</p>	<p>GCSE Computer Science - Exam 1 – Unit 3 Networking</p> <p>GCSE Computer Science - Exam 2 – Unit 4 Data Representation</p> <p>GCSE Computer Science – Programming Project</p> <p>National Curriculum requirements</p>