Computing, Business and Media Curriculum Map

	Year 7	Year 8	Year 9	Year 10	Year 11
Autumn 1	7.1 Getting Started Knowledge: Students will gain knowledge about how interact with the network and the importance of correct folder structure Understanding: They will form an understanding of how to correctly use Microsoft Office Analysis: Students must explain how features can improve documents the importance of email etiquette within the working world Skills: Microsoft Office skills to ensure a professional structure, layout and content	8.1 Inside a Computer Knowledge: Students will learn how each component links to form communication to process instructions Understanding: Students will be understanding the internal and external components functions and how they interact with software. Explain how instructions are processed using the fetch decode execute cycle. Skills: Students will be learning how to take a computer tower with internal components apart. Apply: Peers will be able to apply their understanding of computer architecture in their own life, this would allow students to build their own computers, fix problems and allow them to accurately buy products knowing more details about the specification.	9.1 Creative Media Taster Knowledge: Define the term media. State 3 different media sectors and list 3 examples of products for each. Understanding: Explain how audiences are categorised by gender, age and class. Understand the term narrative and be able to analyse how different narrative structures engage audiences and generate meaning. Analysis: How audience and purpose affect how media products are created. Skills: Students will learn how to create planning documents such as mood boards, page plans and sketches. Apply: Students will be able to apply their pre-production planning materials to create a media product.	GCSE Computer Science Component 1-Computer Systems 1.1 Systems architecture BTEC Creative Media Production Component 1–Exploring Media Products: Learning aim, A: Investigate Media Products BTEC Enterprise Component 1: Exploring enterprises Learning aim, A: Examine the characteristics of enterprises	GCSE Computer Science Component 2 – Computational thinking, algorithms & programming 2.1 Algorithms 2.2. Programming fundamentals BTEC Creative Media Production Component 2 Developing Digital Media Production Skills: Learning aim B: Apply media production skills and techniques BTEC Enterprise Component 2: Planning for and pitching an enterprise activity Learning aim B: Pitch a micro-enterprise activity Learning aim C: Review own pitch for a micro-enterprise activity
Autumn 2	7.2 Digital Behaviours Knowledge: Students will gain knowledge about cyber crime Understanding: They will form an understanding of different cybercrimes such as, hacking, cyberbullying, phishing, malware and fraudulent emails. Analysis: Students must be able to explain the threats cybercrime poses on society and the importance of the awareness people should have. Skills: A multimedia resource	8.2 Presenting Information using Multimedia Knowledge: Students will be able to combine text and images to present information Understanding: Students will form an understanding of how to create multimedia products for different purposes. Analysis: Students will be able to explain the importance of the audience and purpose when creating multimedia products. Skills: Students will learn image	9.2 Business Enterprise Taster Knowledge: Students will know the different types of business ownership Understanding: Students will form an understanding of why it is important to act ethically in business. Analysis: Students will be able to explain the importance of market research to ensure long-term survival of a business. Skills: Students will learn how to collect data as well as calculating	GCSE Computer Science Component 1–Computer Systems 1.2 Memory & Storage BTEC Creative Media Production Component 1 – Exploring Media Products: Learning aim B: Explore how media products are created to provide meaning and engage audiences. BTEC Enterprise Component 1: Exploring enterprises	GCSE Computer Science Component 2 – Computational thinking, algorithms & programming 2.3 Producing robust programs 2.4 Boolean logic 2.5 Programming language and ideas BTEC Creative Media Production Component 2 Developing Digital Media Production Skills: Learning aim C: Review own progress and development of skills

	explaining all the different cyber-crimes which can be used to make others aware of the situations people face daily.	editing techniques such as colour splash, crop, colour fill, effects and background removal. They will also learn how text and images can be presented differently depending on purpose and audience	the finances of a business	Assignment 1: Examine the characteristics of enterprises	and practices. BTEC Enterprise Component 3: Promotion and finance for enterprise Learning aim A: Promotion Learning aim B: Financial records
Spring 3	7.3 Into the Future Knowledge: Students will gain knowledge of how technology impacts society Understanding: They will form an understanding of how technology can change how we live in the future Analysis: Students will apply current knowledge of technology and apply this to different aspects of future advancements within health, education, personal lives and businesses. Skills: The positives and negatives of the evolution of technology with ethical issues and threats that come with.	8.3 Our Digital Society Knowledge: Students will be able to explore the advancements in technology looking at the legal and ethical implications. Understanding: They will form an understanding on how technology is implemented within all areas of society and the impact that has on individuals. Analysis: Students will form balanced arguments looking at the environmental, ethical and legal implications of technology. Skills: The positives and negatives of the evolution of technology with ethical issues and threats that come with. This unit runs for a full term	9.3 Computer Science Taster Knowledge: Students will learn how to solve problems using computational thinking stages Apply: Students will understand the four different stages decomposition, abstraction, problem solving and Algorithms. They will apply these stages to different problematic scenarios to create an effective solution. Skills: Students will harness skills to be able to change algorithms into flowcharts and pseudocode. Understanding: Students should understand the difference between primary and secondary storage. Create: To be able to create effective flowcharts and pseudocode algorithms using sequence, selection and iteration.	GCSE Computer Science Component 1–Computer Systems 1.3 Networks BTEC Creative Media Production Component 3 – Create a media product in response to a brief Learning aim A: Develop ideas in response to a brief Activity 1: Ideas log (2) Learning aim B: Develop planning materials in response to a brief Activity 2: Planning material (3) BTEC Enterprise Component 1: Exploring enterprises Learning aim B: Explore how market research helps enterprises to meet customer needs and understand competitor behaviour	GCSE Computer Science Component 2 – Computational thinking, algorithms & programming Component 1 Revision BTEC Creative Media Production Component 3 – Create a media product in response to a brief Learning aim A: Develop ideas in response to a brief Activity 1: Ideas log (2) Learning aim B: Develop planning materials in response to a brief Activity 2: Planning material (3) BTEC Enterprise Component 3: Promotion and finance for enterprise Learning aim B: Financial records Learning aim C: Financial planning and forecasting
Spring 4	7.4 Databases Knowledge: Students will gain knowledge about the purpose of databases and how they are used in society Understanding: Students will form an understanding about why databases are now computerised and how they have changed over time. Analysis: Students must explain how data is stored, manipulated		9.4 Audio & Video Knowledge: Identify the key components of an audio clip and a video clip Understanding: Explain the good and not so good features of audio clips and video clips. Analysis: Evaluate the importance of the audience when planning and creating audio and video clips. Skills: Create, edit and export an audio clip using Audacity. Create,	GCSE Computer Science Component 1–Computer Systems 1.4 Threats & vulnerabilities BTEC Creative Media Production Component 3 – Create a media product in response to a brief Learning aim C: Apply media production skills and techniques to the creation of a media product Activity 3: Final media product BTEC Enterprise	GCSE Computer Science Component 2 – Computational thinking, algorithms & programming Component 2 Revision BTEC Creative Media Production Component 3 – Create a media product in response to a brief Learning aim C: Apply media production skills and techniques to the creation of a media product

	and deleted within a computer Skills: Sorting, searching, using queries and forms.		edit and export a video clip using Serif Movie Plus.	Component 1: Exploring enterprises Assignment 2: Explore how market research helps enterprises to meet customer needs and understand competitor behaviour	Activity 3: Final media product BTEC Enterprise Component 3: Promotion and finance for enterprise Revision A: Promotion B: Financial records C: Financial planning and forecasting
Summer 5	7.5 Graphics Knowledge: Students will learn how to program in small basic learning simple commands Understanding: Students will be understanding different commands allowing them to create code to allow users to input data. Skills: coding using the correct syntax, debugging, using variable, If, Else, ELIF, Operators and Boolean. Apply: skills in other areas maths (algebra) and English (punctuation) to understand programming concepts Create: Students will be able to create an interactive quiz which will allow the user to answer and receive responses. This will be a combination of knowledge, understanding and skills. Evaluate: Students will assess their peers' work evaluating their code and suggest improvements to be made.	8.5 Party Planning Project Knowledge: Students will learn how to create an efficient spreadsheet using correct formatting and functions. Understanding: Students will be understanding key terminology and their maths knowledge can be implemented within a spreadsheet. Skills: Students will be learning how to enter formulae and functions to perform calculations. Format cells and create charts to display information. Sort and filter data Analysis: Students will be analysing data using visual representation.	9.5 Networking Knowledge: Students will know how device connect to one another across the world Remember: Students will be able to use their own knowledge of how to connect to the internet and advance their understanding in networking. Understanding: Students will understand the difference between the internet and the world wide web. Explain the importance of an IP address and how they differ from DNS. Analyse: Students will be able to analyse different network scenarios and recommend whether a PAN, LAN and WAN would be suitable. They will then delve into the intricacy of networks and recommend the components and how to connect them using the appropriate topology.	GCSE Computer Science Component 1–Computer Systems 1.5 Systems software BTEC Creative Media Production Component 1–Exploring Media Products: Learning aim B: Explore how media products are created to provide meaning and engage audiences. BTEC Enterprise Component 1: Exploring enterprises Learning aim C: Investigate the factors that contribute to the success of an enterprise Assignment 3	
Summer 6	7.6 Computational Thinking & Debugging Knowledge: Students will learn how to program in small basic learning simple commands Understanding: Students will be understanding different commands	8.6 Python Programming Remember: Students will use their knowledge of command words from Small Basic to learn a new programming language. Knowledge: Students will be able to code their own algorithms within	9.6 Data Representation Knowledge: Students will learn data is processed and stored within a digital device. Skills: Students will be able to convert denary numbers into binary	GCSE Computer Science Component 1–Computer Systems 1.6 Ethics BTEC Creative Media Production Component 2 Developing Digital	

	allowing them to create code to allow users to input data. Skills: coding using the correct syntax, debugging, using variable, If, Else, ELIF, Operators and Boolean. Apply: skills in other areas maths(algebra) and English(punctuation) to understand programming concepts Create: Students will be able to create an interactive quiz which will allow the user to answer and receive responses. This will be a combination of knowledge, understanding and skills. Evaluate: Students will assess their peers' work evaluating their code and suggest improvements to be made.	python, recapping their understanding of algorithms from 9.1 Computer Science Starter. Skills: Students will be coding their own programs with different complexities using different command words and operators to compare conditions. Evaluating: Students will be critiquing their own code and their peers to ensure that the programs are effective and to progress using iteration with ease. Create: Students will be creating a variety of complex programs from calculators to games.	and hexadecimal numbers. Understanding: Students will be able to explain how characters, images and sound are represented by binary. To understand factors that affect file size and how to combat these with the use of quality and compression. Apply: To calculate file sizes of sound, images and text files using binary.	Media Production Skills: Learning aim A: Develop media production skills and techniques <u>BTEC Enterprise</u> Component 2: Planning for and pitching an enterprise activity Learning aim A: Explore ideas and plan for a micro-enterprise activity Assignment 1	