Class of 2024/2025 Curriculum Map

BTEC DIT

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39
Post 16 Study	**Progression to Level 3 BTEC qualifications or A Level Computer Science**																																						
Year 11	**Component 3 Part A**							**Component 3 Part B**						**Component 3 Part C**							**Component 3 Part D**					**Exams & finish school**													
	Modern Technologies: How current and modern technologies are used and have an impact on organisations and stakeholders.							Cyber Security: How the increased reliance of organisations on digital systems to hold data and perform vital functions presents a range of challenges and dangers.						Wider implications of digital systems: What the wider implications of digital systems and their use are and the procedures that organisations must follow in order to conform to legal requirements and professional guidelines.							Planning and communication in digital systems: How individuals in the digital sector plan solutions and communicate meaning and intention..																	
	AO.1/AO.2/A0.3/A0.4							***AO.1/AO.2/A0.3/A0.4***						***AO.1/AO.2/A0.3/A0.4***							***AO.1/AO.2/A0.3/A0.4***																	
Year 10	**Component 1 Part A**							**Component 1 Part B**						**Component 1 Part C**							**Component 2 Part A**					**Component 2 Part B**									**Component 2 Part C**				
	Investigate user interface design for individuals and organisations							Use project planning techniques to plan and design a user interface						Develop and review a user interface							Investigate the role and impact of using data on individuals and organisations					Collecting, Presenting and Interpreting Data (use of spreadsheets to produce a dashboard including formulae, graphs, charts)									Draw conclusions and review data presentation methods				
	A.1/A.2/A.3/A.4							***B.1/B.2/B.3***						***C.1/C.2/C.3***							**A.1b/A.2/A.3b/A.4b/A.5/A.6/A.7**					***B.1b/B.2b***									***C.1b/C.2b***				
Year 9	**Functional Skills**													**Functional Skills**												**Functional Skills**													
	Internet research, spreadsheets, email, presenting information, internet security													Internet research, spreadsheets, email, presenting information, internet security												Internet research, spreadsheets, email, presenting information, internet security													
	SS.1/SS.2/SS.3/SS.4/SS.5/SS.6/SS.7/SS.8/SS.9/SS.10& NC.1/NC.2/NC.5/NC.6													***SS.1/SS.2/SS.3/SS.4/SS.5/SS.6/SS.7/SS.8/SS.9/SS.10& NC.1/NC.2/NC.5/NC.6***													***SS.1/SS.2/SS.3/SS.4/SS.5/SS.6/SS.7/SS.8/SS.9/SS.10& NC.1/NC.2/NC.5/NC.6***													
Pre-secondary	**Key Stage 1:** simple algorithms, create and debug simple programs, logical reasoning, use technology purposefully, recognise common uses, use technology safely and respectfully. **Key Stage 2:** design, write and debug programs, use sequence, selection, and repetition in programs, use logical reasoning, understand computer networks, use search technologies effectively, select, use and combine a variety of software, use technology safely, respectfully and responsibly.																																						

	National Curriculum and Assessment Objectives	**NC.1** design, use and evaluate computational abstractions **NC.2** understand several key algorithms **NC.3** use two or more programming languages **NC.4** understand simple Boolean logic **NC.5** understand the hardware and software components that make up computer systems **NC.6** understand how instructions are stored and executed within a computer system **NC.7** undertake creative projects that involve selecting, using, and combining multiple applications **NC.8** create, re-use, revise and re-purpose digital artefacts for a given audience **NC.9** understand a range of ways to use technology safely, respectfully, responsibly and securely	**SS.1** Plan solutions to complex tasks **SS.2** Select, interact with and use ICT systems safely **SS.3** Manage information storage to enable efficient retrieval **SS.4** Use appropriate search techniques **SS.5** Select information from a variety of sources **SS.6** Enter, develop and refine information **SS.7** Use appropriate software to meet requirements **SS.8** Use communications software **SS.9** Combine and present information **SS.10** Evalulate the selection, use and effectiveness of ICT tools	**A1** What is a user interface, **A2** Audience needs, **A3** Design principles **A4** Designing an efficient user interface, **B1** Project planning techniques **B2** Create a project plan, **B3** Create an initial design, **C1** Develop a user interface, **C2** Refining the user interface, **C3** Review **A1b** Characteristics of data and information, **A2b** Representing information **A3b** Ensuring data is suitable for processing, **A4b** Data collection **A5** Quality of information and impact, **A6** Sectors that use data modelling **A7** Threats to individuals, **B1b** Data processing methods, **B2b** Produce a dashboard **C1b** Drawing conclusions based on data, **C2** How presentation affects understanding **AO.1** Demonstrate knowledge of facts, terms, processes and issues in relation to digital information technology **AO.2** Apply an understanding of facts, terms, processes and issues in relation to digital information technology **AO.3** Analyse, evaluate and make reasoned judgements about the use, factors and implications influencing digital information technology **AO.4** Make connections with the concepts, issues, terms and processes in digital information technology
	<u>Curriculum Principles</u> **Balanced** – Promotes intellectual, moral, spiritual, creative, emotional, and physical development as equally important. **Rigorous** – Seeks to develop intra-disciplinary habits of mind; the subject matter is taught in a way that is faithful to its discipline.	**Coherent** – Makes explicit connections and links between the different subjects/experiences encountered. **Progression Model** – Focuses on progression by carefully sequencing knowledge; provides clarity about what getting better at a subject means (knowing and remember more) **Appropriate** – Looks to avoid making unreasonable demands by matching level of challenge to a student's current level of maturity/knowledge.	**Focussed** – Seeks to keep the curriculum manageable by teaching the most important knowledge, identifies the big ideas or key concepts within a subject. **Relevant** – Seeks to connect the valued outcomes of the curriculum to the students being taught it; provides opportunities for students to make informed choices.