

INTENT:

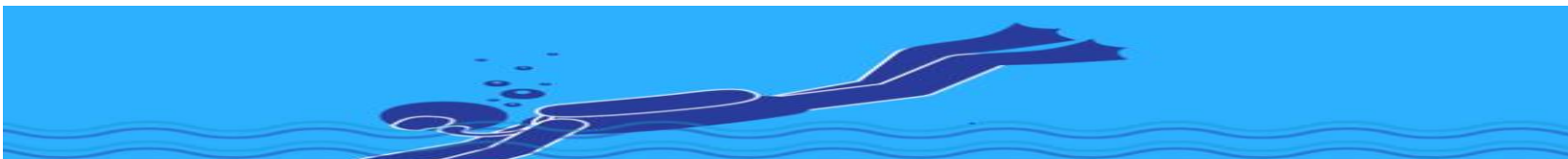


"I do not fear computers, I fear the lack of them"

Isaac Asimov

The use and understanding of computers gives learners the opportunity to develop sector-specific knowledge and skills in a practical learning environment. Can you solve problems? Are you a computational thinker? Do you have a scientific and mathematical way of thinking?

Computers are changing every part of our lives at an ever-increasing rate-why not drive the future?



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Half term points						
12	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2
	Unit 3 Social Media	Unit 3 Social Media	Unit 3 Social Media	Unit 3 Social Media	Unit 3 Social Media	Unit 3 Social Media
	<p>Learning to include:</p> <ul style="list-style-type: none"> Developments in social media affect the way businesses promote products and services. How businesses can use social media websites to support their business aims and needs. Posting different content formats, e.g. text, images, video, links, polls and quizzes 	<p>Learning to include:</p> <ul style="list-style-type: none"> Developing an audience and encouraging people to follow or 'like' the business through the creation and use of engaging content. Keywords and their use in posted content. Developing contacts by following and linking relevant businesses and individuals, and sharing content posted by others. 	<p>Learning to include:</p> <ul style="list-style-type: none"> Negative comments on social media sites and damage to reputation. Time constraints on social media interaction, return on time investment. Unforeseen consequences of posted content. Security issues related to increased company profile as a result of use of social media. 	<p>Learning to include:</p> <ul style="list-style-type: none"> Working with a client to set requirements for the use of social media and the potential benefits for the business when compared to traditional promotion methods. Establishing timescales and responsibilities for the use of social media within a business. 	<p>Learning to include:</p> <ul style="list-style-type: none"> Planning posts and other content to be published on social media websites. Working with a client to create a social media policy applicable to businesses. Selection and use of appropriate social media website tools and techniques to implement a plan 	<p>Learning to include:</p> <p>Working on corrections for coursework submission and revision for exam unit.</p>

	<p>CO BTEC Engineering CO BTEC IT L3.docx</p> <p>Learning to include:</p> <ul style="list-style-type: none"> Types of relational database management systems (RDBMS) and their characteristics. Database relations and relational keys. Relational algebra sets – symbols, union, intersect, join, select Integrity constraints – entity integrity, referential integrity. Entity relationships – one-to-one, one-to-many, many-to-many. <p>KNOWITALL NINJA</p>	<p>Unit 2 Database Management</p> <p>Learning to include:</p> <ul style="list-style-type: none"> Use of RDBMS software tools and structured query language (SQL) for defining, modifying and removing data structures and data: updating, inserting, deletion Retrieval of data for queries, reports. Administration of users including security, integrity and recovery Anomalies – update, insertion, deletion Data dictionary – tables, fields, data types, validation Stages of normalisation Selection of RDBMS and SQL software, tools, techniques and processes. <p>KNOWITALL NINJA</p>	<p>Unit 2 Database Management</p> <p>Learning to include:</p> <ul style="list-style-type: none"> Database design: conceptual, logical and physical modelling and entity relationship modelling. Database implementation techniques: prototyping, data conversion, testing. Quality, effectiveness and appropriateness of the solution: correctness of data, relationships between data, data integrity, normalisation. The features and characteristics of relational database design techniques and their application to solve problems following requirements of the brief <p>KNOWITALL NINJA</p>	<p>Unit 2 Database Management</p> <p>Learning to include:</p> <ul style="list-style-type: none"> Security and legal considerations Data structure designs: data dictionaries and their use: tables, field attributes, validation, use of naming conventions Entity relationship diagrams, normalisation User interface design to allow successful extracting and presentation of data. Design and use of test plans: to check correctness of data, functionality, accessibility, usability. Select and configure appropriate RDBMS and SQL tools to produce a database solution to meet client's requirements: <p>KNOWITALL NINJA</p>	<p>Unit 2 Database Management</p> <p>Learning to include:</p> <ul style="list-style-type: none"> Creating, setting up and maintaining data tables. Creating links, relationships between data tables Applying data validation rules, generating outputs. Devising and using SQL statements to extract, manipulate and modify data Different types of testing: referential integrity, functionality, security. Selection and use of appropriate test data: erroneous data, extreme data. Recording appropriate test documentation. Using testing outcomes to improve and refine a database solution <p>KNOWITALL NINJA</p>	<p>Unit 2 Database Management</p> <p>Learning to include:</p> <ul style="list-style-type: none"> Practice exam papers and revision for exam.
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13	Half term points						
	AUTUMN 1	AUTUMN 2	SPRING 1	SPRING 2	SUMMER 1	SUMMER 2	
	Unit 1 Information Technology	Unit 1 Information Technology	Unit 1 Information Technology	Unit 1 Information Technology	Unit 1 Information Technology	Unit 1 Information Technology	
	Learning to include: <ul style="list-style-type: none"> Uses of digital devices in IT systems to meet the needs of individuals and organisations. Uses of peripheral devices and media in IT systems to meet the needs of individuals and organisations. How emerging technologies can be used by individuals and organisations 	Learning to include: <ul style="list-style-type: none"> How the features of an IT system can affect its performance and/or the performance of a larger IT system. The concepts, process and implications of transferring data within and between IT systems. The concepts and implications for individuals and organisations of connecting devices to form a network. 	Learning to include: <ul style="list-style-type: none"> The features, impact and implications of the use of online IT systems to store data and perform tasks. The features of online communities and the implications of their widespread use for organisations and individuals. The implications of accidental and malicious threats to the security and integrity of data, held in, and used by, IT systems. 	Learning to include: <ul style="list-style-type: none"> The features, uses and implications of systems and procedures used to protect the data of individuals and organisations. How the features of online services are used to meet the needs of individuals and organisations. The features and implications of IT systems used by organisations. 	Learning to include: <ul style="list-style-type: none"> The implications, for individuals, organisations and wider society, of moral and ethical factors of using information technology. The legal issues relating to the use of IT systems and the implications for individuals, organisations and wider society. The moral and ethical factors of the use of IT systems. 	Learning to include: <p>Working on corrections for coursework submission and revision for exam unit.</p>	

Unit 6 Website Development	Unit 6 Website Development	Unit 6 Website Development	Unit 6 Website Development	Unit 6 Website Development	Unit 6 Website Development
<p>Learning to include:</p> <ul style="list-style-type: none"> Identifying the purpose of websites, including the features and principles of website design. With the use of creativity and innovation Search engine optimisation. Understanding where scripts run and the need for Browser compliance. Server-side factors, e.g. bandwidth availability, number of hits, file types. Client-side factors. Understanding the steps involved in developing a design for a client website. Including the purpose of requirements as defined in a client brief for their interactive website <p>KNOWITALL NINJA</p>	<p>Learning to include:</p> <ul style="list-style-type: none"> Application of website design principles by professionally created websites. Initial design ideas/prototypes. Client-side scripting design tools and techniques. Effective use of ready-made and/or original assets Obtaining and using feedback from others to help refine alternative design ideas/prototypes and make decisions. Testing plan requirements and its completion with test data, to test functionality. Identification of technical and design constraints and working around them <p>KNOWITALL NINJA</p>	<p>Learning to include:</p> <ul style="list-style-type: none"> Legal and ethical considerations. Such as copyright, designs and patents legislation and its requirements in terms of protecting software products Use of tools and techniques and their suitability for different client requirements. HTML, HTML5 and subsequent updates. Create suitable website using: tables, forms, navigation, menus, hyperlinks (internal and external), anchors and Interactive component. Colour schemes, styles and templates. Embedded multimedia/digital asset content. Take into account accessibility features and platform compatibility. <p>KNOWITALL NINJA</p>	<p>Learning to include:</p> <ul style="list-style-type: none"> Embedding of original client-side scripts into web pages to provide more interactivity and improve the usability of the website. Use scripting languages to create rollovers, checking/validating input, handling forms. Create interactive websites, including: use of CSS, e.g. HTML tags, CSS frameworks, box model, access CSS from HTML, doc types Quality in comparison with other similar websites, suitability for intended purpose and audience. <p>KNOWITALL NINJA</p>	<p>Learning to include:</p> <ul style="list-style-type: none"> Optimising an interactive website including making refinements and improvements to meet client needs to optimise the website. Planning and recording, including the setting of relevant targets with timescales, how and when feedback from others will be gathered. Reviewing and responding to outcomes, including the use of feedback from others, Demonstrate own behaviours and their impact on outcomes to include professionalism, etiquette, supporting others, timely and appropriate leadership, accountability and individual responsibility. <p>KNOWITALL NINJA</p>	