CTEC Level 3 in Creative Computing (Single)

Part A - Bridging Work Task

This is a fantastic opportunity to expand your understanding of **CTEC Creative Computing** as you prepare for enrolment and start at Franklin in September.

Please complete the work and bring a copy to your enrolment, either printed or electronically.

The work will take you no more than around **2 hours** so plan your time to best suit you.

<table>
<tr><td>How do I complete and submit my task?</td><td>Complete the tasks on paper/handwritten or digitally, and bring a copy, either paper or electronically, to your enrolment appointment. Also, bring this along to your first lesson in September.

If you didn’t attend the Taster Day, don’t worry. It isn’t essential for completing this work, but please ensure that you have completed this bridging work.</td></tr>
<tr><td>Task Details</td><td><u>A1: Functions and use of digital devices</u>

Research below -
In preparation for the start of the course it is important to familiarise yourself with the different digital devices that will be considered within the content.

<u>Your task is to conduct thorough research to complete the table below. The definition for each device has been provided to help support your research.</u>

<u>CTEC Level 3 Creative Computing - Bridging Work</u>
<u>You could download a copy of this document and edit</u>
<u>**OR**</u>
<u>You could draw up your own version of the table below and hand write the table if required.</u>

<table>
<tr><th>Digital Device</th><th>Definition</th><th>Technical Features / How does it work?</th><th>Benefits</th><th>Limitations</th></tr>
<tr><td>Personal Computers</td><td>A personal computer is a general-purpose electronic device designed for individual use.
It allows users to perform a wide range of tasks, including word processing, internet browsing, gaming, multimedia consumption,</td><td></td><td></td><td></td></tr>
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		and creative work.			
	Multifunctional devices	A multifunctional device (also known as an all-in-one printer) is a single piece of office equipment that combines the functionality of several devices, most commonly a printer, scanner, copier, and fax machine.			
	Mobile devices	Mobile devices are small, handheld computing devices designed for portability and personal use. They typically feature a flat-panel display, battery power, and built-in input devices like touch screens or keypads. Examples include smartphones, tablets, and smartwatches.			
	Servers (file, application and web)	File - A file server is a computer connected to a network that provides a centralised location for shared disk access, allowing multiple users to store and retrieve computer files.			
		Application - An application server is a server that hosts, manages, and delivers business applications to client computers or other servers. It provides the environment for running and executing server-side application logic.			
		Web - A web server is a computer program or hardware that stores website content (like HTML files, images, CSS, JavaScript) and delivers it to web browsers upon request using the HTTP/HTTPS protocol.			
	Entertainment	An entertainment			

	systems	system is a collection of electronic components designed to provide audio and video entertainment, often including video gaming and computer functionalities. This can range from a home cinema setup to a portable media player.			
	Digital cameras (still and video)	A digital camera is an electronic device that captures and records still images or video in digital format. This includes dedicated still cameras (DSLRs, mirrorless, compacts) and camcorders, as well as the cameras found in smartphones.			
	Navigation systems	A navigation system is a device or software application that provides guidance to a specific destination, typically using Global Positioning System (GPS) technology to determine location and offer real-time directions.			
Resources to help you with the Bridging Task	**No additional resources required**				

Extension Tasks	
Massive Open Online Courses **(MOOCs)**	Optional online course if you wish - Foundations of Cybersecurity - https://www.coursera.org/learn/foundations-of-cybersecurity#outcomes

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Part B – Preparing for Studying at Franklin

A fantastic opportunity to widen your understanding of the course.

Examining Board and Specification	The Pearson Level 3 Alternative Academic Qualification BTEC National in Information Technology (Extended Certificate) is an Alternative Academic Qualification (AAQ) designed for post-16 students with an interest in the Digital sector and aiming to progress to higher education as a route to graduate level employment. Equivalent to one A Level in size, it is suitable for students looking to develop their applied knowledge and skills in Information Technology as part of a study programme alongside A Levels. **What will the student study as part of this qualification?** The qualification has four mandatory units covering the following topics: · **Information Technology Systems –** Information technology systems, including the relationship between software and hardware, and the issues related to IT systems · **Cyber Security and Incident Management –** Types of cyber security attacks, the vulnerabilities in networked systems and how to plan and respond to attacks · **Website Development –** The development tools, techniques and processes used in website development and how to test usability, functionality and fitness for purpose · **Relational Database Development –** Structure of data, data design and database management systems (DBMS). **What knowledge and skills will the student develop as part of this qualification and how might these be of use and value in further studies?** **Students will develop the following knowledge and skills:** · Knowledge of digital technologies and how organisations plan digital projects and follow a project lifecycle · Understanding of organisation structures and processes and how to embed digital safety to keep data and assets secure · **Technical skills to:**

	o design and build a website to meet user requirements using relevant tools and techniques, including testing for usability, functionality and fitness for purpose o follow a design methodology to create and develop a database design to meet user requirements, including testing the solution **· Transferable skills such as creativity and innovation, written communications, critical thinking and taking personal responsibility.** Students will develop the ability to apply digital concepts to different sectors which is beneficial to the analytical approach included in many degrees. The ability to take personal responsibility and written communication skills will develop students' ability to manage their own work and independently create extended writing tasks which is a good foundation for academic success. **Which subjects will complement this qualification?** **The following subjects would be suitable to combine with this qualification:** · Business · Mathematics · Psychology · Art & Design **What further learning will this qualification lead to?** **This qualification can lead to progression to the following degrees:** · BA Business Studies · BSc Information Systems · BSc Computer Science
Preparing for the course	The link below will send you to the exam board (Pearson) page for the qualification. You will be able to access a document labelled specification - this will show you a detailed breakdown of everything involved within the course across the two years. **https://qualifications.pearson.com/en/qualifications/btec-nationals/information-technology-aaq.html**