THE BULWELL ACADEMY

Key Stage 4 Curriculum Information

ICT: Subject Overview

Qualification	**BTEC Digital Information Technology (Tech Award Levels 1 & 2)**
Exam Board	Pearson
Course Leader	**ICT LEAD: dominic.hayton@bulwellacademy**
Course summary	The Tech Award gives learners the opportunity to develop subject-specific knowledge and a chance to develop transferable skills for life.
What will students learn?	**Component 1 – Exploring user interface design principles and project planning techniques:** This component focuses on students developing knowledge on user interfaces that are used every day on digital devices. They look at features of interfaces and how these are used to support all users? Students learn all the different types of user interface and why they are created, focusing on the impact these have on the use.
	Component 2 – Collecting, presenting and interpreting data: This component focuses on students developing knowledge of data handling. The component allows students to understand how companies collect data about different individuals and for what purposes? They look at how presentation affects how information and how messages can get lost.
	Component 3 – Effective digital working practices: This is the final component that students will undertake during Year 11 this is assessed by a written paper examination and focuses on how companies use modern technologies and Digital IT. The component continues to focus on the impacts associated with using Digital IT and the laws associated with the use.
How will students be assessed?	Students undertake two coursework units (completed in a set window) and one exam unit. The exam unit is worth 60 marks.
What skills will I need?	• Critical Thinking, analysis and problem solving. • Practical transferable skills • Lead to careers such as: • IT Project Management • Technical Support • Cyber Security • Web Designer • System Analysis • Games Development • Network Manager • ICT Teacher/Lecturer

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Year 10 ICT Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	The User Interface	The User Interface The Project Plan	Develop and Review a User Interface	Data Collection and Analysis	Create a dashboard using data	Draw conclusions & review data presentations methods
Knowledge Covered	• Types of interface • Range of uses • Factors affecting the choice of user interface • Hardware and software influences • Accessibility needs • Skill level of user • Demographics of use • Impact of colour use • Impact of font style/size • Language used on User interface • Amount of information on interfaces and impact • Layout – consistency, navigational components • User controls • User perceptions of user interface • How to retain user attention • Intuitive design • Investigating techniques to improve speed and access to user interface	• Different planning tools • Different methodologies • Use of SMART aims/objectives • Audience and purpose • What project requirements • Timescales to be used • Constraints to be solved • What potential risks? • Design skills that meet needs • Being able to design specification • Being able to produce designs	• Features used to meet requirements • How to refine completed designs • Strengths and weaknesses of chosen design • (As above) but including • Use their plan to develop and refine an effective user interface that shows all features and assess the strengths and weaknesses of their user interface and project plan, justifying decisions made	• Characteristics of data • Characteristics of information • Representation of information • Validation Methods • Verification Methods • Data collection Methods • Data Collection Features • Big Data • Factors of quality of information • Types of sectors • Data modelling in decision making • Threats to individuals	• Data Processing methods • Produce a dashboard • Appropriate presentation methods • Presentation features	• Drawing conclusions • Making recommendation • Misinterpreted information • Biased information • Inaccurate conclusions
Online Resources	Know it All Ninja https://www.teach-ict.com/glossary/A.htm (technical glossary) https://www.bbc.com/bitesize/subjects/zqmtsbk					

Published: September 2023

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Year 11 ICT Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Modern technologies Cyber security`	The wider implications of digital systems	Planning & Communication in digital systems **Exam Sitting 1**	Focus on exam technique and exam practice across the terms and addressing gaps from Assessment 1		**Exam Sitting 2**
Knowledge Covered	• Knowledge of communication technologies • Features of cloud storage/computing • Knowing when collaboration is needed • Implications for organisations when using technology • Changes to modern teams • How modern technologies impact • How communication between stakeholders occur • Positive and negative impacts of modern technology • Why systems are attacked? • External threats and risk to organisations • Internet threats and risk to organisations • Impacts of security breaches • Use of policy to protect organisations	• Know how to responsibility use Digital systems • Impact on environment • Ethical and legal implications • Blurring of social and business boundaries • Data protection principles • Planning solutions and communicate meaning and intention • Know different planning notation to explain systems	• Forms of notation using data flow diagrams	Address gaps from exam sitting 1. Focus on exam technique and exam practice for this term.		
Online Resources	https://www.knowitallninja.com/courses/effective-digital-working-practices/					

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