

## **St Benet Biscop Learning Journey**

We aim to help students to learn about the latest devices and technology used in enterprises, social lives and business practices. Students will learn how to create and develop software plus how IT and technology benefits our lives today.

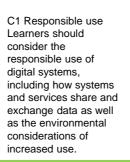


## **BTEC Digital IT**

HARDWARE AND SOFTWARE

<u>\*</u> U

C2 Legal and ethical Learners should understand the scope and purpose of legislation (valid at time of delivery) that governs the use of digital systems and data, and how it has an impact on the ways in which organisations use and implement digital systems. Learners should understand the wider ethical considerations of use of technologies, data and information, and organisations' responsibilities to ensure that they behave in an ethical manner.



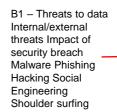
B3 Policy Learners should understand the need for and nature of security policies in organisations. They should understand the content that constitutes a good security policy and how it is communicated to individuals in an organisation. To ensure that potential threats and the impact of security breaches are minimised, learners should understand how procedures in security policies are implemented in organisations. B2 - Prevention and management of threats to data Learners should understand how different measures can be implemented to protect digital systems. They should understand the purpose of different systems and how their features and functionality protect digital systems. Learners should understand how one or more systems or procedures can be used to reduce the nature and/or impact of threats.

Learning Aim C -Draw conclusions and review the data Learners will draw conclusions on the data set, using their dashboard in order to make recommendations.



Component 3 – Effective digital working practices A1 Modern technologies Understand how and why modern technologies are used by organisations and stakeholders to access and manipulate data, and to provide access to systems and tools in order to complete tasks. Learners should understand the implications of these tools and technologies for organisations and stakeholders. Learning Aim A Communication technologies Cloud storage Stakeholders Selection of platforms Networks Synchronisation

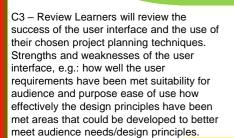
B Cyber Security Learners should understand why systems are attacked, the nature of attacks and how they occur, and the potential impact of breaches in security on the organisation and stakeholders



B2 – Produce a dashboard Learners will use a dashboard to select and display information summaries based on a given large data set. Show data summaries from the data set Learning Aim B – Create a dashboard B1 - Data processing methods Learners will understand how data can be imported from an external source. They will then explore how to apply data processing methods.

A2 – Representing information Learners will understand the different ways of representing information and will be able to explain situations where they would be used. A2 -Text/numbers/tables/ Graphs A3 – Validation/verification A4 – Data Collection A5 – Quality of information A6 – Sectors that use data modelling A7 – Threats to individuals

Component 2, collecting presenting and interpreting data A1 – Investigate the role of data in organisations Learners will understand the concepts of data and that data is meaningless without converting it into information by adding structure and context.



C2 – Refining the user interface Learners will refine their user interface using an iterative process with potential users. Refining the designs by: presenting the design to potential users refining the interface to account for potential user feedback repeating the iterative process until the design is complete. Document the changes made through each iteration.



C1 – Develop/Review a user interface Learners will use their design to produce a user interface. Features: awareness of intended device, e.g. touchscreen, watch how the user requirements have been met the overall look and feel inputs, e.g. key presses, mouse clicks, touch outputs, e.g. error messages, sounds navigation methods ease of use

Year 11 BTEC

B1 – Project planning techniques Learners will investigate different B2 – Create a plan Learners will select suitable project planning techniques to develop a project plan for the development of a user interface for a given brief. SMART aims Audience and purpose Project requirements Timescales Constraints Risk

A2 - User needs Types of

speech/natural language

GUI/WIMPs sensors menu/forms

interface: text based

B3 – Create an initial design Learners will create an initial

planning tools and design methodologies that can be used to plan, monitor and execute projects. Planning tools: task lists written or graphical descriptions Gantt charts critical path diagram PERT charts mood boards mindmaps design using the design principles listed in section A3. Produce a design that meets: the user requirements, including input and output requirements user accessibility needs.

A1 - What is a user interface? Learners will

investigate different types of user interfaces

They will investigate how they vary across

used by individuals and organisations.

different uses, devices and purposes.

features human features how software

features can be used to facilitate human-

Definition of user interface: software







A4 – Designing a user interface ? Factors affecting the choice of user interface: performance/response time ease of use user requirements user experience accessibility storage space

Year

10 BTEC



Introduction Course requirements. Grade Scheme. Where to find resources. Folder Setup. Homework calendar. Student/Teacher expectations.

A3 – Design principles Range

controlling devices embedded

of uses, e.g.: computers

entertainment systems

domestic appliances

handheld devices

systems

Component 1 – Part A Learners will investigate different types of user interfaces used by individuals and organisations. They will investigate how they vary across different uses, devices and purposes. What is User Interface (UI)? User Interface (UI) is the visual part of an application or device that determines how a user interacts with franc how information is displayed on the screen.

device interaction.

Start of BTEC