

Curriculum Intent 2023/2024

Subject: BTEC

	Year 10	Year 11	Year 12	Year 12/13(combined class)
HT 1	Comp.1-Aim A-Explore User Interface design principles. Knowledge To know the design principles used in different user interfaces to meet the user needs. Application Be able to identify the design principles used in different user interfaces to meet the user needs. Comp.1-Aim B-plan and design a user interface. Knowledge To know the project planning techniques needed to plan a user interface that meets the user requirements. Application Be able to use project planning techniques and design a user interface that meets the user requirements.	Comp. 3 – A. Modern technologies Knowledge Learn how to set up a network, what is an ad hoc and open network. This is how computers communicate and share data. Data needs to be saved. Understand what cloud storage and storage computing is. How to use cloud and traditional systems. Learn new modern technologies regarding communication, collaboration and planning. Understand how modern technology is used in remote working for both organizations and employes. Application Be able to: Determine issues affecting network availability, like coverage and blackspots. Work with level of permissions regarding accessing storage space. Find the best solution to store data according to many parameters like compatibility and security. Choose the best communication platform for sharing information and data. Describe positive and negative impacts of modern technology in organizations and determine the best option to choose. Choose among different working styles according to flexibility (remote, choice of time, device, location) and wellbeing.	Unit 3-Aim A- Explore the impact of social media (AVU) Unit 2- Aim A - The purpose and structure of relational database management system (ASA) Knowledge To know the types of relational database management systems (RDBMS) and their characteristics. To know the RDBMS software tools and structured query language (SQL) for defining, modifying and removing data structures and data. To understand the role of normalisation to develop efficient data structure. Application Demonstrate knowledge of database development terminology, standards, concepts and processes.	Unit 1- Learning Aim A: Digital devices in IT systems& Transmitting data (KGR) Knowledge Lean about personal computers, mobile devices and entertainment systems, digital, peripheral devices, input devices, output devices and storage devices Application. Describe digital devices that form part or all of IT systems. Describe personal computers, mobile devices and entertainment systems. Describe digital cameras both still and video. Describe peripheral devices, input devices, output devices and storage devices. Describe the purpose, features and uses of application software. Unit 6- Learning Aim A- principles of website development (AVU). Knowledge Students should learn what principles apply when creating a website. They will learn that companies, need to adjust design principles according to the intended audience and the intended purpose of the website. Application. Students will choose two websites. They will have to identify, analyse and evaluate the design principles for each one of them. Then they will have to justify how design principles meet user needs.
HT 2	Comp.1-Aim B- plan and design a user interface. Knowledge To know the project planning techniques needed to plan a user interface that meets the user requirements.	Comp. 3 – B. Cyber Security Knowledge Understand why systems are hacked and describe external threats. Understand how data can be lost in organizations, maliciously or accidentally.	Unit 3- Aim B- Develop a plan to use social media Unit 2- Aim B- Standard methods and techniques to design relational database solutions Knowledge	Unit 1- Learning Aim B: Operating online& Protecting data and information.(KGR) Knowledge wireless and wired methods of connecting, networks, PAN, LAN & WAN, choice of network:

Application Be able to use project planning techniques and design a user interface that meets the user requirements. Comp.1-Aim C- Develop and review a user interface. Knowledge To understand how a plan is used to develop a user interface. To understand how feedback is used to refine a user interface. To know the features used in user interfaces. To know how to evaluate a user interface. Application Use their plan to develop a user interface. Use features on their user interface. Collect feedback from others and refine the user interface. Assess the strengths and weaknesses of the user interface and the project plan, justifying decisions made.

Learn different types of access restrictions that user needs, cost, connectivity, productivity, To know the RDBMS and SQL software, tools, techniques and processes used to design relational can be used to prevent data loss. Learn some software that is used to protect the To know the features and characteristics of relational Application. security of the systems. database design techniques and their application to Learn how the law is used and what policies are solve problems. followed by companies when they hire people. Application between IT systems. **Application** Apply knowledge and understanding of database Be able to: terminology, standards, concepts and processes to Identify threats and act when unauthorised design a relational database solution to meet a client access is happening. Understand the consequences of security breach and the importance to act to prevent it. productivity. Work with access protocols and be able to help conducting tests to make sure data are safe. Work with software that prevents data breach. Knowledge Work effectively with sensitive data knowing the consequences of illegal actions and knowing what steps to follow in case of an attack. online communities Application.

implications of cloud storage and cloud computing. Describe systems that enable and support remote working: VPNs, remote desktop technology. Understand ways of communicating and interacting with online communities: social media, blog, microblog, vlog, wiki, chatrooms, instant messaging, podcasts, forums. Unit 6- Learning Aim B- Design a website (AVU) Knowledge Learn how to produce an initial design of a website. Students will learn how to display many webpages linked together in a logical way. Application. Students will be given a vocational scenario. According to this scenario, they will have to create a design. They will have to implement specific principles so that the design fit the purpose of the website and the client

HT 3

Comp.1-Aim C- Develop and review a user interface.

Knowledge

To understand how a plan is used to develop a user interface.

To understand how feedback is used to refine a user interface.

To know the features used in user interfaces.

To know how to evaluate a user interface.

Application

Unit 3- Aim B- Develop a plan to use social media Unit 2- Aim C-Creating a relation database structure Knowledge

To know how to select and configure appropriate RDBMS and SQL tools to create a database solution to meet client's requirements.

To know how to test and refine the database solution.

Application

diagram of an IT system

Explain wireless and wired methods of connecting devices and transmitting data within and

Describe the features, use and purpose of different networks: Personal area network (PAN) and Local area network (LAN).

Describe the factors affecting the choice of network: user needs, cost, connectivity,

Draw a diagram to show how an IT system works.

Unit 1- Learning Aim C: Operating online.(KGR)

cloud storage and cloud computing, remote working: VPNs, remote desktop technology,

Describe the personal and professional uses and

Unit 1- Impact of IT systems.(KGR)

Unit 1-Protecting data.(KGR)

Unit 6- Learning Aim B- Design a website (AVU) Knowledge

Learn how to take feedback in their design. Producing key questions to other website users so they can understand how to improve an initial design.

Application.

requirements.

Comp. 3 - C. Implication of digital systems.

	Use their plan to develop a user interface. Use features on their user interface. Collect feedback from others and refine the user interface. Assess the strengths and weaknesses of the user interface and the project plan, justifying decisions made. Completion of incomplete work for component 1.		Apply knowledge and understanding of database terminology, standards, concepts and processes to create a relational database solution to meet a client brief. Analyse information about database problems and data from test results to optimise the performance of a database solution.	Students will have to improve the initial design that they have completed according to feedback that they will be given. Some students should be able to give feedback to other designs according to specific criteria of the project.
HT 4	Comp.2-Aim A- Investigate the role and impact of using data. Knowledge To know the data collection methods used across individuals and organisations. To understand how data is used to make decisions by individuals and organisations. Application Identify data collection methods used across individuals and organisations. Evaluate how data is used to make decisions. Comp.2-Aim B- Create a dashboard using data Knowledge To know the methods used to manipulate data. To know how to create a dashboard that summarises data. Application Use methods to carry out manipulation of data accurately. Create a dashboard that summarises data.	Comp. 3 – D. Planning and Communication	Unit 3- Aim C- Implement the use of social media Unit 2- Aim D-Evaluating a database development project Knowledge To know the characteristics, concepts, impact, and implications of testing methodologies to monitor and evaluate database design, the database created, testing processes and success of the solution. Application Evaluate a design against the given requirements. Evaluate the application of test data to ensure that the database solution meets the requirements. Evaluate the software outcomes against the given requirements.	Unit 1- Issues Unit 6- Learning Aim C
HT 5	Comp.2-Aim B- Create a dashboard using data Knowledge To know the methods used to manipulate data. To know how to create a dashboard that summarises data. Application Use methods to carry out manipulation of data accurately. Create a dashboard that summarises data. Comp.2-Aim C- Draw conclusions and review data Knowledge To understand how the dashboard can be used to identify trends in data and make decisions. To know the methods used to present data. Application Use the dashboard and identify trends in data and how it affects decision making. Explain the methods used to present data.	Revision	Unit 3- Aim C- Implement the use of social media Unit 2-Revision &Exam	Unit 1- Revision Unit 6- Aim C- Develop a website
HT 6	Comp.2-Aim C- Draw conclusions and review data Knowledge To understand how the dashboard can be used	Revision	Completion of incomplete work.	Unit 1- Revision &Exam

To know the methods used to present data.		
<u>Application</u>		
Use the dashboard and identify trends in data		
and how it affects decision making.		
Explain the methods used to present data.		
Completion of incomplete work for component		
2.		