SUBJECT: ICT/Computing

Key Stage 4: Curriculum Intent (BRIEF):

	Year 10	Year 11
	Topic: Component 2: Collecting, Presenting and Interpreting Data	**Topic:** Component 1: Exploring User Interface Design Principles and Project Planning Techniques
	Content covered, including knowledge and skills: - To investigate the role and impact of using data on individuals and organisations - To create a dashboard using data manipulation tools - To draw conclusions and review data presentation methods **Links to prior learning:** - Spreadsheets - Ethics - Algorithms **Links to British Values and SMSC:** Students will know about ways in which data and information can be used by organisations to aid with the decisions they need to make. There are ways of manipulating data in order for it to be useful and presentable so that decisions can be made. Students will learn advanced features of Microsoft Excel and create their own dashboard in order to look at the resulting information and draw conclusions.	**Content covered, including knowledge and skills:** - A Investigate user interface design for individuals and organisations. - B Use project planning techniques to plan and design a user interface. - C Develop and review a user interface **Links to prior learning:** - Case Study – Charity Presentation - Ethics - Websites and HTML **Links to British Values and SMSC** Students will learn about the many different ways of interacting with Computer Systems that they can find in the world around them. Students will also be creating their own User Interface for a client and will need to learn various planning techniques, methodologies and types of evaluation in order to meet client expectations.

Career opportunities:

- Database Manager
- HR Manager
- Administrator
- Entrepreneur

Literacy: Key words and terminology

- Processed
- Validation
- Verification
- Primary Data
- Secondary Data
- Sample
- Big Data
- Accuracy
- Sectors
- Modelling
- Privacy
- Inaccurate
- Manipulation
- Dashboard
- Presentation
- Trend
- Anomalies
- Bias

Career opportunities:

- UI Designer
- Project Manager
- Programmer
- Software Designer

Literacy: Key words and terminology:

- GUI
- Command Line
- Response Time
- Accessibility
- Skill Level
- Demographics
- Navigation
- Gantt Chart
- Critical Path Diagram
- PERT Chart
- Mood Board
- Waterfall
- Agile
- SMART Aims
- Timescales
- Constraints
- Requirements
- Feedback

Topic: Component 3: Effective Digital Working Practices

Content covered, including knowledge and skills:

- A - Modern Technologies
- B - Cyber Security
- C - The wider implications of digital systems
- D - Planning and communication in digital systems

Links to prior learning:

- Networks
- Ethics
- Computer Security
- Algorithms

Career opportunities:

- Hardware Engineer
- Software Developer
- IT Technician
- Network Manager
- Web Designer
- HR Manager
- Systems Administrator

Links to British Values and SMSC

Students will learn how organisations use digital systems and the implications of their use. Organisations have become more global in recent years which has had an impact on how they operate and how they use technology

to facilitate this. Students will look this in a range of vocational contexts so that they gain a greater understanding of these technologies and give judgements on the effectiveness of the systems for organisations.

Literacy: Key words and terminology:

- Ad Hoc
- Infrastructure
- Blackspots
- Scalability
- Collaboration
- Synchronisation
- Maintenance
- Interface
- Accessibility
- Remote Working
- Cloud Computing
- Flexibility
- Espionage
- Malware
- Phishing
- Biometrics
- Encryption
- Hacking (White/Grey/Black Hat)
- Disaster Recovery
- Cookies
- Acceptable User Policies
- Net Neutrality
- Data Protection

	- Computer Misuse - Data Subject Rights - Data Flow Diagram - Flowchart - System Diagram - Information Flow Diagram	