Subject: Information and Communicati **Kay Stage 4 Curriculum Plan** **Year:** 10

Department Information:

Students follow the program:
BTEC Digital Information Technology Level 1/2 from Pearsons.

Teachers:

Curriculum aims and intent:

Students will have the opportunity to study the different aspects of technology and information communication technology, with the intention that students will be able to progress to higher levels of study or to a professional career.

Students will have the opportunity to investigate what makes a good user interface, including understanding why user interfaces are designed in that way, including aspects such as accessibility.
Students will learn how to manipulate spreadsheets, looking at how data is represented and how to avoid biases impacting the understanding of the data.
Lastly students will learn about the technology behind ICT such as cloud storage. Students will also learn about the laws that dictate what acceptable use of technology is and the consequences of not following the laws regarding business practices.

Assessment:

Students will complete eight end of topic tests throughout years 10 and 11, alongside mock tests. These mock tests are:

Resources used to support learning:

BBC Bitesize
w3schools
Pearson Revision Guide

Home Learning:

Students are given one piece of homework per week which are then reviewed in lesson time. This homework will give students a valuable opportunity for recalling and retrieving information.

How parents can help their child:

Encourage the students to complete their homework alongside using a revision guide.

Term	Summary of work being covered	Knowledge, Understanding and skills assessed	How the work is assessed	Career Links
1	Effective User Interfaces Input and Output Devices User Accessibility Needs Making Efficient User Interfaces Planning Tools	What makes a good user interface How can people interact with computers What difficulties might people have when using computers How can I make my user interface efficient?	In class assessments Homework Students will be completing coursework in term 2	UX/UI Designer – designs apps and websites that are easy and enjoyable to use; Game Designer – creates menus and controls for video games; Web Designer – makes websites clear and user-friendly.
2	Component 1 Coursework	Students will be completing coursework based on the topics learned in term 1	Component 1 Coursework	
3	Data Collection Methods Representing Data Quality of Information Creating a dashboard Concluding and Reviewing Presentation Methods	What advantages and disadvantages do different data collection methods have? How can I represent my data? How do I know data is of good quality? How can we display information? How do I know if my presentation methods are good?	In class assessments Homework Students will be completing coursework in term 4	Business Analyst – collects and analyses sales data; Sports Analyst – records and studies player statistics; Scientist – collects experimental results; Office Administrator – organises information using spreadsheets.
4	Component 2 Coursework	Students will be completing coursework this term based on the topics learned in term 3	Component 2 Coursework	
5	Communication Technologies Cloud Technologies Using Cloud Technologies Modern Team Working Inclusivity and Accessibility	How do we use computers to communicate? What is the cloud? How are cloud storage and cloud computing used? How can we use technology to work together? How can we make our workplace an inclusive workplace?	End of topic test at the end of term	Network Engineer – keeps school, business and internet networks running; Telecommunications Engineer – works with mobile phone and broadband networks; IT Support Technician – helps people connect to networks and devices.
6	System Attacks and External Threats Internal Threats and Impacts User Restrictions Data Level Protection Backup policy and data recovery	How are attacks on our systems performed? What internal threats may cause problems for our company? How can I be sure only the people who need to see something see it? What can I do to prevent data loss?		Cyber Security Analyst – protects organisations from hackers and viruses; Ethical Hacker (Penetration Tester) – tests systems for security weaknesses; Digital Forensics Investigator – investigates cybercrime.