Subject	BTEC Digital Information Technology
Paper	Computer 3: Effective Digital Working Practices
Work/skills/activities being covered in lesson leading to exams	**Week 1 – Modern Technologies** **Communication Technologies:** • How to set up networks like Wi-Fi hotspots and sharing data between devices. • Why open Wi-Fi can be risky for your safety. • Problems that come with using these types of networks, like slow speeds. • Issues that affect network connection: Country differences, rural vs. city areas, and lack of coverage in some places. **Cloud Computing:** • What cloud computing is (using the internet for apps and data). • Why it's important to keep versions of files the same for everyone using them. • Working together on a single file at the same time. • Tools that help you collaborate online. **Week 2 – Features of Cloud Computing and Storage** **Cloud Storage Features:** • How to set who can see and edit your files in the cloud. • How to keep your files synced across all your devices. • Cloud storage lets you access your files anytime, anywhere. • You can get more storage when needed without needing extra equipment. **Cloud Computing Features:** • Using online apps to do things like work or study. • Keeping everyone's file versions the same. • Working on the same file together. • Tools that help you work with others from a distance.

Week 3 – Online Platforms

Choosing Platforms for Cloud Technologies:

- How picking the right platform can affect the features you get.
- Free tools vs. paid tools.
- How the platform looks (e.g., simple layout, mobile-friendly).
- Using it on different devices (phones, tablets, laptops).

Week 4 – Modern Teams

How Technology Changes the Way Teams Work:

- Teams can now work together from anywhere in the world.
- Teams can have people from different countries, cultures, and backgrounds.
- Teams can work any time of the day or night, no matter where they are.
- More flexibility with work – working from home or in the office.

Week 5 – Impact of Modern Technologies on Organisations

How Modern Tech Affects Companies:

- How companies need special equipment and platforms to run smoothly.
- Keeping everything running smoothly with the right tech.
- Making sure data is secure even when it's spread out.
- Giving everyone equal chances to work and be included, no matter their background.
- Remote work and the legal rules companies need to follow.

Week 6 – Threats to Data

Why Hackers Attack:

- Sometimes it's just for fun or challenge.
- Some hackers do it to steal information or money.
- Some hackers attack to cause disruption or hurt others.

Types of Cyber Threats:

- Hackers trying to access your systems illegally.
- Malicious software like viruses and ransomware that mess with your data.
- Cyber attacks that overwhelm your system (like DDoS).
- Phishing, social engineering, and sneaky ways to steal your info.

Week 7 – Prevention and Management of Threats

Protecting Data:

- Limiting who can access data with passwords, biometrics, or special tools.
- Using software like firewalls and anti-virus tools to keep bad stuff out.
- Backing up data to prevent loss and keeping it safe with encryption.
- Ensuring data is kept safe when it's being transferred.

Week 8 – Policy

Setting Rules for Security:

- Who is in charge of what when it comes to security.
- What employees should and shouldn't do with company devices and data.
- Making sure data gets backed up and recovered in case something goes wrong.

Week 9 – The Wider Implications of Digital Systems

Shared Data:

- Benefits and risks of sharing data between apps and services.
- Why it's important to use data responsibly and protect people's privacy.
- The environmental impact of technology, from making it to throwing it away.
- How to be mindful of saving energy when using tech and upgrading devices.

	Week 10 – Legal and Ethical **Equal Access to Services and Information:** • Why it's important to make sure everyone can access the same services and information. • Laws and guidelines that require equal access to online services. • Acceptable Use Policies: Rules that tell you how you should and shouldn't use tech, how it's monitored, and what happens if you break the rules/
Areas to revise as a priority leading to exams	**Modern Technologies** • Cloud computing: benefits, drawbacks, and impact on individuals/businesses. • Virtual teams and remote working: advantages and challenges. • Communication technologies: email, instant messaging, video conferencing, VoIP. • Collaborative tools: online document sharing, version control. **Cyber Security** • **Threats**: phishing, malware, hacking, social engineering, weak passwords. • **Prevention Measures**: firewalls, anti-malware, encryption, authentication methods. • **Data protection**: importance of strong passwords, multi-factor authentication. **The Impact of Digital Systems on Individuals and Organisations** • Efficiency and productivity: how digital systems improve workflow. • Digital devices in the workplace: advantages and disadvantages. • Legal and ethical considerations: GDPR, copyright laws, acceptable use policies. • Sustainability: environmental impact of digital systems, e-waste, energy consumption. **Planning and Communication in Digital Systems** • **Project planning tools**: Gantt charts, PERT charts, critical path analysis. • **Data presentation**: choosing the right data visualisation methods.

	• **Effective communication**: audience needs, presentation methods (reports, slides, infographics). • **Workplace practices**: file management, version control, backups, accessibility considerations.
Suggested methods of revision	• Mind maps • Past Papers – within folders, green penned • <u>Know it all ninja website</u> • Mock questions – within folders, green penned • Flashcards for key terminology • Revision books and same questions / answers. • Complete revision clocks to check knowledge and fill in any gaps of unknown content. Prioritise spending time revising the unknown content • Going over past mocks and notes work • Use of resources on Teams, e.g. lesson slides and video support links • Seneca