BTEC Digital Information Technology (IT) – Year 11 – AP1 Medium Term Plan/SOW

The Academy of St Francis of Assisi

UNIT 3	Title: Effective Digital Working Practices	Number of lessons in sequence	11 (including revision, assessment & improvements)

| Overarching Curricular Goals (Aims) (What do you intend students know about and be able to do by the end of the topic, or scheme of learning. Critical knowledge needed to inform later learning and wider contexts.)

Outcomes/ Success Criteria | **By the end of this unit students will:**
Students will have completed one unit of coursework over the course of the last academic year. This component will give them an opportunity to explore how the developments in technology over recent years have enabled modern organisations to communicate and collaborate more effectively than ever before. The component is designed to allow students to explore the digital systems available to organisations and how their features have an impact on the way organisations operate. They will explore how developments in technology have led to more inclusive and flexible working environments, and how regulation and ethical and security concerns influence the way in which organisations operate.

Knowledge Learners will:
• Understand how modern technologies are used to exchange information, to communicate and collaborate in society today.
• Understand the impact that modern technology has on modern working practices in the workplace and at home when used for personal reasons.
• Understand the different risks and threats faced by organisations who use digital systems and how these can be minimised through effective policy setting, training and robust disaster recovery plans.
• Understand the methods used to use technology in a responsible manner and the legislation and ethical considerations in place to ensure that organisations retain control of their data systems.
• Understand the different planning and communication tools that can be used in digital systems to monitor and assess the flow of data and information through digital systems.

Skills Learners will:
• Be able to identify the difference between cloud storage and cloud computing and how these are used alongside traditional IT systems to improve working technologies.
• Be able to describe how modern teams use technology to improve internal and external communication and to enhance collaboration opportunities.
• Be able to identify the different threats faced by organisations and describe the different security policies and how these should be communicated to minimise the risk of potential threats from security breaches.
• Be able to describe the benefits and drawbacks of shared data and the ethical, legal and environmental impacts of sharing data digitally.
• To be able to interpret and illustrate the flow of data and information using flow charts and data flow diagrams. | **Links to National Curriculum**

Links to & building upon prior learning Including KS2 if Yr7 | Understand how changes in technology affect safety, including new ways to protect their online privacy and identity, and how to identify and report a range of concerns. Students to develop their capability, creativity and knowledge in computer science, digital media and information technology

Students completed a unit of coursework looking at using technology to provide user interfaces in the last academic year. They have been studying developments in IT systems and how these are used to communicate in different methods since Year 9. By the end of this unit the students should have a well-rounded understanding of how ICT is used in modern society and the impacts that this can have when they are threatened. |

2/3 tier vocabulary.	Differentiation/Scaffolding/Support.	Stretch and challenge opportunities in class, enrichment and home learning.	Opportunities for wider reading/Listening/watching.
See Knowledge Organiser **Oracy:** Also Add hyperlink to KO	**Knowledge Support:** Using the knowledge organiser to enable Students to be able to link theoretical components to the skills they are learning. Students to be encouraged to use KO when looking at key topic areas. Additional resources have been purchased from Know It All Ninja to allow students to view the theory online via a series of short videos, this will support the visual learners and will allow students to revisit any elements of the theory at their own pace. **Reading support**: Encouraging Students to use their Pearson Revise BTEC Tech Award Digital Information Technology Revision Guide to support them with the dual coding homework as prior knowledge before their next lesson and as a consolidation of already completed theoretical components. Differentiated group/pair work in some lessons will take place during this unit of work when this fits in with content delivery.	More able Students will be able to have access to 4-8-mark written questions from previous exams papers based and Pearson Practice Assessment on this unit of work. They will have the opportunity to self/peer assess their answers and improve their work based on feedback they are given. These questions allow Students to demonstrate the ability to construct and develop a sustained line of reasoning in order to achieve higher mark bands on the tiered questions. Students will receive targeted support through boosters to ensure that they have the depth of knowledge required and will also be encouraged to complete the PG Learning Resources independently to enhance comprehension and application of theory. Less able Students will be grouped with students who are able to provide peer support. They will be encouraged to focus on successful completion of all 2-4 mark written questions so that they will be able to achieve greater success in the final examination. They will also receive additional opportunities to attend targeted booster support sessions, in small groups, to enable them to be more confident and successful.	- Know It All Ninja Online Learning Resources - Know It All Ninja Unit 3 Resource Pack - Pearson Revise BTEC Tech Award Digital Information Technology Revision Guide - PG Learning Resource Pack

Unit Title	Sequence of learning Lesson title, theme, big question.	Key concepts/outcomes/knowledge and skills. (Could also add lesson vocab here)	Assessment/ including specific content/ knowledge/skills tested. Green=assess/Blue=improve	HWK. Add Hyperlink To be in books clearly marked	Furthering Cultural Capital. & Opportunities for reading	Recall of prior or future topics –	Lesson resources including or hyperlink to supporting websites/resources/books/texts & individual lessons. 5xT+L essentials to be included in individual lessons,
1-5	Communication Technologies	- Understand the different types of network connections available in modern teams. - Understand the setup and structure of Ad Hoc networks. - Be able to identify and describe the security issues linked with open networking. - Review the performance issues with ad-hoc networks and the impact on working practices. - Describe the different issues affecting network availability and the impact that this has on modern working practices.	**Teacher** Written formal assessment based on content covered within this section. **Student** recall activities as starters each lesson to identify misconceptions. Worksheet based activity to demonstrate understanding.	**Lesson 2**- Duel Coding – Ad Hoc Network Connections **Lesson 3** – Dual Coding – Ad Hoc Network Issues **Lesson 4** – Knowledge Organiser Revision from Lessons 1-5	BTEC D-IT Revision Guide	Students will have completed previous tasks on Topic A so lessons will all involve recall of the key concepts. Students will be encouraged to make links to upcoming topics based on the course Specification.	**Teacher PowerPoints** **Printed Student Resources**
6-9	Cloud Services	- Understand the features of cloud storage including access rights, synchronisation availability and scalability. - Understand the features of cloud computing including online applications, file sharing, collaboration and file type compatibility. - Understand how the selection of computing platforms and services impacts the use of different cloud technologies. - Understand how cloud services and traditional systems can be used together to ensure effective working practices. - Understand the implications on organisations when choosing cloud technologies and how this might adversely impact their existing systems and customer experiences.	**Teacher** Written formal assessment based on content covered within this section. **Student** recall activities as starters each lesson to identify misconceptions. Worksheet based activity to demonstrate understanding.	**Lesson 6**- Duel Coding – Cloud Storage facts, benefits and drawbacks **Lesson 7** – Dual Coding – Cloud computing and collaboration tools **Lesson 8** – Duel Coding – Features of cloud services and platform considerations	BTEC D-IT Revision Guide	Students will have completed previous tasks on Topic A so lessons will all involve recall of the key concepts. Students will be encouraged to make links to upcoming topics based on the course Specification.	**Teacher PowerPoints** **Printed Student Resources**

10	Disaster Recovery	- Understand the factors to be considered when selecting a cloud service provider and how this might impact the security of your data - Understand the implications for organisations when choosing cloud service providers. - Understand what a disaster recovery policy is and how this differs between traditional and cloud service providers.	**Teacher** – Informal assessment completed within lessons using verbal discussion skills. **Student** – Informal assessment during class-based discussion. Worksheet based activity to demonstrate understanding.	**Lesson 10** – Duel Coding – Differences between cloud and traditional systems	BTEC D-IT Revision Guide	Students will have completed previous tasks on Topic A so lessons will all involve recall of the key concepts. Students will be encouraged to make links to upcoming topics based on the course Specification.	**Teacher PowerPoints** **Printed Student Resources**
11	System Set-Up and Maintenance	- Understand how cloud technologies impact the maintenance factors within ICT systems. - Understand the different maintenance schedules between cloud service providers and traditional ICT systems. - Understand and be able to describe the different set-up and performance related issues between cloud service providers and traditional ICT systems.	**Teacher** Informal verbal assessment with class based questioning based on content covered to date. **Student** – Informal verbal/written assessment during class-based discussions. Worksheet based activity to demonstrate understanding.	**Lesson 11** – Knowledge Organiser Revision from lessons 6-11	BTEC D-IT Revision Guide	Students will be encouraged to recall facts about cloud service providers and their individual features in order to draw links with current topic area.	**Teacher PowerPoints** **Printed Student Resources**
12-13	Modern Teams (Technology Impacts)	- Understand how modern teams and work life balance issues have been impacted by developments within the technology sector. - Understand how modern technology can be used to manage communication channels within modern teams. - Understand how modern technology can be used to allow stakeholders within an organisation to successfully collaborate.	**Teacher** Written formal assessment based on content covered within lessons 1-11. **Student** recall activities as starters each lesson to identify misconceptions. Worksheet based activity to demonstrate understanding.	**Lesson 13** – Padlet homework on communication pictures	BTEC D-IT Revision Guide	Students will recall how their working practices changed during Covid-19 school closures and reflect on the impact technology had on home working.	**Teacher PowerPoints** **Printed Student Resources**
14-15	Modern Teams (Collaboration, Communication, Scheduling and Planning Tools)	- Understand the different types of technology that can be used to support communication and collaboration. - Understand how technology can be used in modern teams to support communication, collaboration and scheduling. - Understand how modern teams use technology to improve communication channels with all stakeholders. - Understand the different scheduling and planning tools that can be used within a business to help it to plan its business functions.	**Teacher** Informal verbal assessment based on content covered within this section. **Student** recall activities as starters each lesson to identify misconceptions. Worksheet based activity to demonstrate understanding.	**Lesson 14** – Planning Tools Research Worksheet **Lesson 15** – Duel Coding - Communication and Collaboration Tools	BTEC D-IT Revision Guide	Students to recall experiences of home working during Covid-19 school closures and how they communicated with friends, family and school.	**Teacher PowerPoints** **Printed Student Resources**

16	Impacts on Individuals and Working Practices	- Understand the positive and negative impacts developments in technology have on individuals and their working practices. - Understand the long-term effects of these impacts on performance, personal and health related issues.	**Teacher** Informal verbal assessment based on content covered within this section. **Student** recall activities as starters each lesson to identify misconceptions Worksheet based activity to demonstrate understanding.	**Lesson 16** – Students to ensure that all duel coding activities on Pages1-17 and Pages 20-21 have been completed	BTEC D-IT Revision Guide	Students to recall experiences of home working and the impact that this had on them and their mental health.	**Teacher PowerPoints** **Printed Student Resources**
17	Impacts on Organisations and Infrastructure	- Understand the impacts of modern technology on the infrastructure of a business. - Understand that sometimes it is better to improve a system than to install a new technology infrastructure due to the cost benefits associated with infrastructure changes. - Understand how different platforms impact the success of a business and the linked benefits and drawbacks of each platform category. - Understand the benefits and drawbacks associated with using modern technology to provide 24/7 access to resources whilst maintaining data security factors. - Understanding the impact that remote working can have on a business providing a comprehensive service/product.	**Teacher** Informal verbal assessment based on content covered within this section. **Student** recall activities as starters each lesson to identify misconceptions. Worksheet based activity to demonstrate understanding.	**Lesson 17** – Working Practices Worksheet	BTEC D-IT Revision Guide	Students will recall previous lessons where we explored the impact on individuals and will relate them to business contexts and the associated issues.	**Teacher PowerPoints** **Printed Student Resources**
18-20	Interface Designs	- Understand how interface design can impact the usability of technology. - Understand how accessibility features can positively or negatively impact the success of an organisation working with their clients. - Understand how interface designs can assist or hinder flexible working practices being successful within organisations.	**Teacher** Written formal assessment based on content covered within lessons 1-11. **Student** recall activities as starters each lesson to identify misconceptions. Worksheet based activity to demonstrate understanding.	**Lesson 18** – Knowledge Organiser Revision from lessons 1-18	BTEC D-IT Revision Guide	Students will recall key learning from previous year and their User Interfaces coursework with design principles integration.	**Teacher PowerPoints** **Printed Student Resources**