Intent, Content and Progression Route Map
ICT

Intent:
Computer studies is a subject aimed at providing learners with the skills required to engage within the digital world in which we live. Digital literacy is a part of school and everyday life and as such it is essential that all learners study computer studies in order to function within the digital world in which they live and be a functional member of society. Learner's deficient of digital skills and the qualifications needed to progress into further education or the workplace will struggle to fulfil their potential as adults within society.
Our vision is for all learners to leave Trinity Academy Newbridge with the functional skills and technological tools required for day-to-day life. We aim to develop all learners to their full potential through innovative teaching and the use of engaging activities, whilst recognising learners needs and abilities ,ensuring the correct support is available to enable their learning potential is maximised. By doing so, we aim to develop the levels of digital literacy required for our learners to become capable and active members of society.
By offering functional skills tailored to each individual student, we support them in achieving at least one ICT qualification by the end of Year 11, thus enabling progression onto their next steps into further education or apprenticeships. We place high levels of importance on raising pupil confidence and ability in the use of ICT to allow for an active and responsible role within the educational environment and society, helping them to overcome any preconceptions or difficulties with ICT whilst instilling a love of the subject and learning along the way.

Implementation

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	**Knowledge: Unit 1 Technology E-safety** **Skills/Sub-units** 1a. Introduction to school systems 1b. Online trust 1c. Staying safe online 1d. Cyber abuse 1e. Smart searching 1f. Copyright 1g. Assessment	**Knowledge: Unit 2: Technology** **Skills/Sub-units** 2a. Explain Input, process, and output 2b. Input devices 2c. Output devices 2d. Storage devices 2e. Storage sizes 2f. Wired devices 2g. Wireless devices 2h. RAM - ROM 2i. CPU – Fetch Execute Cycle 2j. Secondary storage	**Knowledge: Unit 3 Technology** **Skills/Sub-units** 3a. Software 3b. Operating systems 3c. Application software 3d. Utility software 3e. Open-source software 3f. Proprietary software **Knowledge: Unit 4 Technology** **Skills/Sub-units** 4a. Computer Networks 4b. Computer Network topology 4c. Technology Unit Assessment	**Knowledge: Unit 5: Spreadsheet** **Skills/Sub-units** 5a. Identify cells using rows and columns 5b. Insert data and formula 5c. Enter text and numbers 5d. Perform simple calculations 5e. Present data 5f. Formula replication 5g. Problem solving 5h. Design an formatting 5i. Assessment	**Knowledge: Unit 6: Programming/Scratch** **Skills/Sub-units** 6a. Data flow / Flowcharts 6b. Sequencing 6c. Programming concepts 6e. Conditional statements 6f. Iteration / selection 6g. Variables 6h. Motion control 6i. Assessment	**Knowledge: Unit 6: Programming/Scratch Project** **Skills/Sub-units** 6j. Project design 6K. Project review 6l. Project creation 6m. Project evaluation 6n. End of Unit assessment

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 8	**Knowledge: Unit 1 Technology /E-safety** **Skills/Sub-units** 1a. Online trust 1b. Staying safe online 1c. Cyber abuse 1d. Social media **Knowledge: Unit 1 Technology /E-safety** **Skills/Sub-units** 1e. Passive & Active Attacks 1f. Virus, Malware & Worms 1g. Scareware & Trojan Horse 1h. Spyware & Ransomware 1i. Network Forensics & Penetration Testing	**Knowledge: Unit 2 Technology** **Skills/Sub-units** 2a. Pharming & Phishing 2b. Antivirus Software & Firewalls 2c. Application software 2d. Alan Turing & Encryption 2c. Assessment	**Knowledge: Unit 3: Spreadsheets** **Skills/Sub-units** 3a. Use of formula 3b. Formatting 3c. Use functions to perform calculations 3d. Order and present data 3e. Sort and Filter data 3f. Advanced Sort and Filter 3e. Creating and edit graphs 3f. Financial tracking 3g. Assessment	**Knowledge: Unit 4: Programming/Scratch** **Skills/Sub-units** 4a. Sequencing 4b. Variables, data types, and operators 4c. Use of Operators in a program 4d. Using conditional statements 4e. Count controlled iteration 4f. Game design 4g. Debugging a program 4e. Problem solving 4f. Assessment	**Knowledge: Unit 5: Web development** **Skills/Sub-units** 5a. Overview of HTML tags and their purpose. 5b. Create a basic HTML document. 5c. Formatting and Styling with CSS. 5d. Apply basic formatting using CSS. 5e. HTML tags for creating tables and forms. 5f. HTML structure, tags, and common coding errors. 5g. Design and implement a simple form. 5h. Development/Structure of a HTML page.	**Knowledge: Unit 5: Web development** **Skills/Sub-units** 5i. HTML Project design 5j. HTML Project review 5k. HTML Project creation 5l. HTML Project evaluation 5m. End of Unit assessment
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 9	**Knowledge: Unit 1 Technology /E-safety** **Skills/Sub-units** 1e. Networks 1f. Cloud Storage 1g. Cloud Computing 1h. Cloud Systems 1i. Working Collaboratively 1j. System Attacks	**Knowledge: Unit 1 Technology** **Skills/Sub-units** 2a. Data Breach 2b. Firewalls, Anti-Virus, Backup 2c. The Data Protection Act 2d. The Computer Misuse Act 2e. Environmental Issues 2f. Assessment	**Knowledge: Unit 3: Spreadsheets** **Skills/Sub-units** 3a. Applying basic mathematical formulas in spreadsheet software. 3b. Utilise conditional formatting in spreadsheets. 3c. Use built-in functions in spreadsheet software to perform complex calculations.	**Knowledge: Unit 3: Spreadsheets** **Skills/Sub-units** 3d. Organise and sort data in spreadsheets based on specific criteria. 3e. Create visual representations of data using graphs and charts. 3f. Create a model using spreadsheet software to calculate calories and protein to identify a good breakfast and perform analysis using spreadsheet functions. 3g. End of unit assessment	**Knowledge: Unit 5: Functional Skills** **Skills/Sub-units** 5a. Using the internet find and select information. 5b. Efficient web searches 5c. Website evaluation / safety 5d. Identify target audience. 5e. Select and prepare text. 5f. Appropriate formatting 5g. Bullets and numbering 5h. Design a product for a target audience	**Knowledge: Unit 5: Functional Skills** **Skills/Sub-units** 5i. Create a business card for an identified scenario. 5j. Edit images 5k. Add features to images. 5l. Combine text and images 5m. Page layout features. 5n. Create a Flyer for an identified scenario. 5o. Create a storyboard for a video. 5p. Create a video for an identified scenario. 5q. Evaluation

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
EDSQ Year 10	**Knowledge: Unit 1 – Find and evaluate information** **Skills/Sub-units** 1a. Search for information on digital devices. 1b. Techniques to refine searches 1c. Find Relevant information 1d. Search functionality 1e. Reliable sources of information 1f. Sponsored links / search engines 1g. Website certificates	**Knowledge: Unit 2 – Manage and store information** **Skills/Sub-units** 2a. Logical organisation of data 2b. The role of meta data 2c. How computers transfer and store data 2e. Digital data storage methods 2f. Data back-up methods 2g. Effective use of cloud storage	**Knowledge: Unit 3 – Solving technical problems** **Skills/Sub-units** 3a. Common technical problems 3b. Resolving technical problems **Knowledge: Unit 4 – Creating and editing documents** **Skills/Sub-units** 4a. Formatting documents 4b. Adapting documents for target audience 4c. Create professional documents	**Knowledge: Unit 5 – Editing and enhancing digital media.** **Skills/Sub-units** 5a. Using images 5b. Image features 5c. Modify images / quality 5d. Using images in a document 5e. Produce a professional document with enhanced images.	**Knowledge: Unit 6 – Processing numerical data** **Skills/Sub-units** 6a. Modify data within a spreadsheet 6b. Use of tools within a spreadsheet to show relevant data 6c. Use sort and filter tools to find information in larger datasets 6d. Format cells to show data correctly 6e. Perform mathematical operations within a spreadsheet 6f. Use formulae to automate calculations 6g. Creating charts in spreadsheets 6h. Create a spreadsheet to manage financial data	**Knowledge: Unit 7 – Communicating and Sharing** **Skills/Sub-units** 7a. Different contexts that influence the use of online communication 7b. Types of online communication 7c. Appropriate responses using online communication 7d. Methods of online communication 7e. Modes of online communication 7f. Comparing different types of electronic communication
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
FS Year 11	**Knowledge: Unit 8 Transacting Digitally** **Skills/Sub-units** 8a. Identify ways to transact online. 8b. Common online services. 8c. Manage online accounts. 8d. Online privacy 8e. Comparison websites and features 8f. Using HTTPS for financial transaction	**Knowledge: Unit 9 Safe and responsible online and on digital devices** **Skills/Sub-units** 9a.Steps to protect devices 9b. Authentication methods 9c Security of personal devices 9d. Ways to protect data 9e. Encryption and VPN 9f. Being responsible online	**Knowledge: Unit 9 Safe and responsible online and on digital devices** 9g. Laws and legislation 9h. Health and Safety 9i. Digital wellbeing **Revision**	**Revision/ Mocks**	**Mocks**	**Exams**

Impact

In our increasingly technological world, it is more important than ever for our pupils' to be competent and confident when using a variety of technological resources. Our aim is for all students to leave Trinity Academy Newbridge with an ICT related qualification ranging from Entry Level 1 to Level 2 functional skills in ICT.

ICT functional skills qualifications demonstrate the ability to apply digital skills efficiently and effectively within the world of work whilst potentially providing access to a range of next step options following Trinity Academy Newbridge.

The Functional Skills Level 2 qualification grants students access to a range of courses when applying to study in FE, it also provides the learner with pre-requisite qualifications needed for the Access to HE courses. Learner will also have the digital skills to pursue an apprentice route as they will have achieved digital skills that are needed within several working environments. All levels of ICT qualification studied at Trinity Academy Newbridge will support with an application for a job or apprenticeship.