Kettering Buccleuch Academy
The best in everyone™

ICT Curriculum Plan Whole Academy

PRIMARY	KEY STAGE 3	KEY STAGE 4	KEY STAGE 5

Curriculum Intent

Key Stage 3

The KS3 ICT curriculum has been designed to give students a real understanding of their digital environment, develop key skills and prepare them for their future use of IT in their chosen careers across a wide range of job roles. It also covers how they can safely interact with IT at work, home and in study. It is about applying understanding and skills to use technologies to select data, manipulate, store, analyse and present it as information, and follow a project life cycle to structure how it's done. The delivery of the content in year 8 is aimed at developing these skills over the year allowing students to access all key types of software to work towards completing a given project, the project allows freedom of choice for students in terms of design, content, and structure following demonstrations of the basic skills to ALL students. This allows students to be able to stretch themselves when confident but also ensure all students have the same basic ICT knowledge.
In year 9 student carousel each term where they also focus upon a project following the project lifecycle, allowing all students to experience a start and end point of a project but whereby the created product allows for individuality and the an opportunity for students to use as many of the skills as capable.

Key Stage 4/5

The KS4 and 5 ICT curriculum have both been designed to give students a real understanding of their digital environment, develop key skills and prepare them for their future use of IT in their chosen careers across a wide range of job roles. It also covers how they can safely interact with IT at work, home and in study. It is about applying understanding and skills to use technologies to select data, manipulate, store, analyse and present it as information, and follow a project life cycle to structure how it's done. Students are all the given the same scenario to plan, build, test, and evaluate a product. All students have the opportunity to access the entire curriculum, they are then able to demonstrate and apply their knowledge to the best of their ability through the coursework and the exams.

1. **How do you ensure consistent delivery of the subject across all key stages?**
   - Consistent technical vocabulary (focus on tier 3 langauge)
   - Units are selected to create foundations in KS3 for development in KS4, delivered largely by the same teachers
   - Use of knowledge organisers to develop theoretical understanding

2. **How does the curriculum cater for disadvantages, SEND and other minority group students?**
   - Use of knowledge organisers inside and outside of lessons
   - Projects allow for individuality in terms of contents and design decisions (stretch and support where needed)
   - Choice of resources in delivery varies to suit a wide range of learner such as the use of websites to support learning, practical modelling, one to one support and instant feedback on progress.

3. **How does the curriculum embed prior knowledge and aid long-term retention of knowledge?**
   - Units are selected to create foundations in KS3 for development in KS4, delivered largely by the same teachers
   - EYFS/KS1 and KS2 all experience lessons within the ICT rooms used at KS3/4 and 5 allowing them to become comfortable with the hardware and software used.

PRIMARY

Year	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
EYFS	Completing games on the iPad, computer and IWB. Knowing how we can find out information on the computer. Programming beebots. Playing CDS. Selects different types of technology for their own purpose.					
1	Use of technology	Creating, organising, storing, and manipulating retrieving digital content.	Algorithms	Creating and debugging simple programs.	Predicting behaviour of programmes.	Internet safety
2	Recognise use of ICT within and beyond school.	Internet safety – use technology safely and privately.	Understanding algorithms	Create and debug programs	Use reasoning to predict behaviour of programs	Use technology to create and store digital content
3	Use search technologies effectively	Recognise use of ICT within and beyond school.	Internet safety – use technology safely and privately.	Understanding algorithms	Creating and debugging simple programs. 'Beebot' – Driverless cars	Use ICT to design and create content - Footwear design rendering
4	No ICT being taught.					
5	E-safety	Design, write and debug programmes	Design, write and debug programmes	Use of ICT in wider context	Use search technologies effectively Use ICT to design and create content	Use ICT to design and create content
6	Web Development	Web Development	No ICT being taught	No ICT being taught	Graphic Design	Graphic Design

KEY STAGE 3

	1st Half of the year (Sep – Jan)	2nd Half of the year (Jan-July)
7	• Log on to the computer • Sign into OneDrive • Navigate to the student resources folder • Create a folder in their OneDrive • Save a file with a suitable file name to their OneDrive	• Login to their email • Send an email with a subject and attachment • Save an image from the Internet • Create a Powerpoint with text, images • On word be able to insert a text box, an image and use of the header and footer
8	• **Internet Safety** • Creating a booklet to highlight Internet Safety • **Music Festival PowerPoint** • - Planning – Wireframes, Success Factors • - Creating a PowerPoint • - Evaluating	• Spreadsheets • Internet Safety Day 1 lesson when it is Internet Safety Day • Databases • Project Life Cycle Theory
	Mid-Year Assessment **Wireframes, Success Factors, Slide Master** **Tools used in Powerpoint,**	**End of Year Assessment** **Spreadsheets, Databases, Stages of the Project Life Cycle, Planning Tools, Threats to Data,**
9	• **Internet Safety** • Creating a booklet to highlight Internet Safety • Project Life Cycle Theory • - Tools and Techniques • - How Data and Information is collected • - Threats to Data • Gantt Charts • Spreadsheets • Databases	• Spreadsheets • Internet Safety Day 1 lesson • Databases • Project based on the Project Life Cycle – intention of using a spreadsheet, database, poster, powerpoint and business card
	Mid-Year Assessment **Tools and Techniques, How Data and Information is collected, Threats to Data, Gantt Charts, Spreadsheets, Databases**	**End of Year Assessment** **Spreadsheets, Databases, Stages of the Project Life Cycle, Planning Tools, Tools used in Powerpoint, Business card**

KEY STAGE 4

	1st Half of the year (Sep – Jan)	2nd Half of the year (Jan-July)
10	• L01: The tools and techniques that can be used to initiate and plan solutions • L03: How data and information can be collected, stored and used • L04: The factors to be considered when collecting and processing data and storing data/information • L06: The different methods of processing data and presenting information • L07: Select and present information to meet an identified need • L08: How to carry out an iterative review	• **Project Life Cycle (Coursework preparation for June)** • - Initiation • - Phase review • - Planning • - Phase review • - Execution – Spreadsheet task, Database task • - Phase review • - Evaluation
	Mid-Year Assessment Year 10 will sit their GCSE R012 exam in January – The date is to be confirmed	**End of Year Assessment** **Year 10 will start their GCSE coursework in June. Date to be confirmed**
11	• **Coursework:** • Continue to complete the coursework • **Theory:** • L01: The tools and techniques that can be used to initiate and plan solutions • L04: The factors to be considered when collecting and processing data and storing data/information	• L03: How data and information can be collected, stored and used • L04: The factors to be considered when collecting and processing data and storing data/information
		March Mock Exams • L06: The different methods of processing data and presenting information • L07: Select and present information to meet an identified need • L08: How to carry out an iterative review
	November Mock Exams	**ACTUAL GCSE EXAMS.**

KEY STAGE 5

	September – November	December – March	March - June
12	• **Unit 1 – Fundamentals of IT** • - Computer Components • - Types of Computer Systems • - Computer Hardware • - Connectivity Methods • - Communication Hardware • - Hardware Troubleshooting • - Units of Measurement • - Number Systems & Conversions • **Unit 2 – Global Information** • - Holders of Information • - Types of Information Storage Media • - The Internet • - Information Formats • Information Styles • Information Classification • Quality of Information	• **Unit 1 – Fundamentals of IT** • - Types of Software – Application Software, Utility Software • - Operating Systems • - Protocols • - Types of Servers • - Networking Characteristics & Topologies • - Business Systems • - Communication Skills & Technology • - Types of Software – Application Software, Utility software • Personal Attributes • - Ready for Work & Job Roles • - Personal Bodies • - Industry Certification • **Unit 2 – Global Information** • Categories of Information • Stages of data analysis • Legislations • Green IT • Information sources and datatypes • Data flow diagrams • Information Management • Data vs Information • Principles of information security • Protection measures	Coursework: Unit 21 – Web design and Prototyping • Fundamentals of Web design • Plan a website • Create a website • Test the website Unit 8 Project Management - Methodologies - Minutes of Meetings - Gantt chart
	November Mock Exam	**March Mock Exam**	**End of Year Exam**
13	Coursework: Unit 21 – Web design and Prototyping • Present the website • Evaluation Unit 8 Project Management • Reports • Evaluation	• Revise for re-sit in both Units (1&2) • Practice Past papers	• Revise for re-sit in both Units (1&2) • Practice Past papers
	November Mock Exam	**March Mock Exam**	**ACTUAL A LEVEL EXAMINATION**