

Year Group 7	Term One	Term Two	Term Three	Term Four	Term Five	Term Six
Intent of Study	<p>In Year 7 at SAIL, computing acts as a bridge between the structured DC360 primary curriculum and the more independent, skills-focused learning they will need for KS4 digital qualifications. Students arrive having experienced Deliver Computing 360 in KS1 and KS2 (e.g. "Programmers Unite!", "Programming Continued", "Online Safety and Security", "Computers and their uses"), so the Year 7 curriculum is designed to consolidate these foundations and gently extend them in new contexts.</p> <p>Across the year, students revisit familiar strands – Online, Media, Programming, Computing/Systems, Office/Data, Information – but work with more open-ended tasks and higher expectations of independence. In the Online strand, they deepen their understanding of safe, respectful and effective digital communication, moving from "knowing the rules" (KS2) to making good decisions about what and how they share information.</p> <p>In the Media strand, students draw on prior work with images and simple video (DC360 movie making and graphics) and start to focus on clarity of message, audience and purpose, preparing them for more sophisticated media projects and portfolio work later in KS3 and KS4.</p> <p>In Programming, they build on block-based and Logo-style coding from primary and DC360 by working systematically with sequences, variables, selection and iteration in a supportive environment (e.g. Scratch). The aim is to secure core computational thinking – breaking problems down, testing and debugging – which will later transfer to text-based languages and real-world tasks.</p> <p>The Computing/Systems strand extends KS2 knowledge of "computers and their uses" into an understanding of networks and the internet, developing accurate language for how data moves between devices. In the Office/Data strand, students build on KS2 word processing and spreadsheets by learning to organise and analyse data in spreadsheets more purposefully, which prepares them for databases, data science and the applied data tasks they will meet in Functional Skills and workplace contexts.</p> <p>By the end of Year 7, students have revisited all the main areas introduced by DC360 primary, but at a deeper level: they can talk about staying safe, present ideas clearly, follow and modify programs, and work with structured data. This sets up a spiral of skills where concepts are returned to in Year 8 and Year 9 with increasing complexity, leading into practical digital qualifications at KS4 such as NCFE Digital Functional Skills and Digital Skills for Work, where accuracy, problem-solving and confident use of common applications are essential.</p>					
Year 7	<p>Safety & Security 1</p> <p>NC Link: 2,4,6,9</p>	<p>Movie Making</p> <p>NC Link: 4, 6, 7 & 8</p>	<p>Logo / Games</p> <p>NC Link: 2 & 3</p>	<p>Control Systems</p> <p>NC Link: 2, 3, 4, 5, & 6</p>	<p>Word Processing</p> <p>NC Link: 1,4,6,7,8</p>	<p>AI & Smart Systems</p> <p>NC Link: 1,2,3,5,6,7 & 8</p>
	<p>Prior Knowledge</p> <p>Building on Unit 02 "The Online World" and Unit 03 "Online Safety and Security" at KS2 where the primary schools covered some dangers online and a look at basic viruses.</p> <p>Key Knowledge</p> <p>How to communicate and keep safe. How to conduct yourself online be that by email, text, messenger, social media etc. Understanding the dangers of talking to others, bullying, viruses and scams including phishing and catfishing.</p> <p>Students Will:</p> <p>Demonstrate</p>	<p>Prior Knowledge</p> <p>Building on skills from Unit 01 "Safety & Security" at KS3 where it is important to consider what is published, netiquette and being understanding of others.</p> <p>Key Knowledge</p> <p>How to produce a series of short clips with open and closing credits, green screen effects, panning, zooming and chroma key. Plus Adding sound.</p> <p>Students Will:</p> <p>Learn how special effects are created then make 2 mini clips with effects using a range of tools including chroma key.</p>	<p>Prior Knowledge</p> <p>Building on Unit 04 "Programmers Unite!" and Unit 05 "Programming Continued" at KS2 where algorithms were introduced.</p> <p>Key Knowledge</p> <p>How to produce your first program. What a sub program is and how it works. Shape calculations with variables to change the shape, size and orientation.</p> <p>Students Will:</p> <p>Learn to program using variables and sub programs. Logo student will use shapes to make a house. When the word house is typed,</p>	<p>Prior Knowledge</p> <p>Building on Unit 01 "Computers and their uses", Units 04 "Programmers Unite!" & 05 "Programming Continued" from KS2 to further develop algorithms.</p> <p>Key Knowledge</p> <p>How to produce a flowchart. What a sub program is and how it works and integrates with the main program. Calculations with variables such as input buttons to initiate functions. Auto sensors such as light and temperature to trigger events.</p> <p>Students Will:</p>	<p>Prior Knowledge</p> <p>Understanding how a computer works. Using our "how to save" skills from KS2. Use of etiquette from Unit 01 "Safety & Security" from KS3.</p> <p>Key Knowledge</p> <p>How to produce professional documents using advanced text editing & formatting tools. Understanding how auto content pages work. Set up, manage and understand what a mail merge is. Introducing the concept of a database.</p> <p>Students will:</p> <p>Learn several</p>	<p>Prior Knowledge</p> <p>Understanding how a computer works. Basic knowledge of inputs, outputs and processes from KS2. Awareness of online safety and responsible use from Unit 01 "Safety & Security" in KS3.</p> <p>Key Knowledge</p> <p>Understanding what Artificial Intelligence (AI) is and how it is used in everyday life. Recognising how smart systems use data to make decisions. Understanding inputs, processes and outputs in smart systems. Introduction to machine learning and how systems can improve over time. Understanding basic ethical concerns and</p>

	<p>netiquette by understanding people's feelings. Learn to communicate and send email, texts, instant messaging, posts, promotional material, and voice commands. They also learn how to use DC360 correctly. Understand the dangers online from other users and viruses. Students will create a range of notices, newspaper articles, signs to demonstrate knowledge.</p> <p>Unit Objectives</p> <p>To understand the potential dangers of being online.</p> <p>To understand the methods used to be safe online. To understand how to report dangers or online issues. To understand how to protect your online data. To understand how to communicate correctly online.</p> <p>Unit Outcomes</p> <p>Explain netiquette and how to communicate online. Explain how to adjust the privacy settings. List the dangers that can be faced online. Identify a list of software methods used to keep you safe.</p>	<p>Students will create the opening sequence for a new children's TV series called, "Football Valley" and a special effects sequence for a sci-fi movie where a reptile attacks a city.</p> <p>Unit Objectives</p> <p>To identify how special effects are made. To understand what the term special effect is and how they are used. To understand what Chroma Key and Green Screening are. To understand overlays and effects. To understand how to add text.</p> <p>Unit Outcomes</p> <p>Identify how a number of effects were created. Identify the use of green screen systems. Create a short video with overlay, pan/zoom, fading and cutting. Add opening titles and end credits.</p>	<p>the image is drawn with a tree, garage, garden etc.</p> <p>Unit Objectives</p> <p>To understand the potential of Logo programming with sub programs / routines. To understand the use of directional instructions. To understand the need for sub programs. To understand the difference between running a program and calling a program. To understand how to create code made of sub programs, that can work together to produce an end product.</p> <p>Unit Outcomes</p> <p>Identify and use directional controls. Explain and use sub programs effectively. Use commands that both run and call a program. Write a main and several sub routines to make the end product.</p>	<p>Learn to create flow charts to control a range of everyday items including lights, hand wash facilities and fairground rides. Student will create the class fun fair grabber game that they can then play. Students move an arm and claw to try to grab a cuddly toy from the machine.</p> <p>Unit Objectives</p> <p>To understand the potential of procedures. To understand the use of different shapes in a flow chart. To understand the need for decisions. To understand the importance of delays. To understand what input and interactivity are.</p> <p>Unit Outcomes</p> <p>Identify shapes in a flowchart and state their meanings. Explain the purpose of a decision diamond with examples. List the reasons why delays are important. Explain the purpose of input and the meaning of interactivity</p>	<p>packages, to create, edit and correct documents using a range of tools. Students will understand the need to ensure all documents are fit for purpose. They will use a wide range of word processors like MS Word, Google Docs, Open Office Write, Word pad and a range of desktop publishing applications e.g., MS-Publisher, Serif Page Plus, Affinity Designer etc.</p> <p>Unit Objectives</p> <p>To understand the potential of a word processor. To understand the methods used to enhance the document. To understand how to use features in a word processor. To understand the importance of the target audience. To understand how to be sustainable in the office.</p> <p>Unit Outcomes</p> <p>Make a list of features used in a word processor. Identify the features in the "Tuning In" document. Explain why the target audience is important. Explain how to reduce pages, preview etc, while being fit for purpose.</p>	<p>risks of AI systems.</p> <p>Students will:</p> <p>Explore a range of real-world AI systems such as voice assistants, recommendation systems and smart devices. Identify how data is collected and used by these systems. Create and test simple models or rules-based systems to simulate AI. Understand how smart systems make decisions based on patterns and data. Discuss benefits and limitations of AI in society.</p> <p>Unit Objectives</p> <p>To understand what AI and smart systems are. To understand how data is used to inform decisions. To understand how inputs, processing and outputs apply to smart systems. To understand the benefits and risks of AI. To understand ethical considerations when using AI technologies.</p> <p>Unit Outcomes</p> <p>Identify examples of AI and smart systems in everyday life. Explain how a smart system works using inputs, processes and outputs. Describe how data is used to make decisions. Explain advantages and disadvantages of AI. Demonstrate a simple AI or rule-based system and evaluate its effectiveness.</p>
Year Group 8	Term One	Term Two	Term Three	Term Four	Term Five	Term Six

<p>Intent of Study</p>	<p>In Year 8 at SAIL, computing builds directly on the Year 7 foundations and the DC360 primary experience by revisiting key strands with greater technical depth and independence. Students now move more clearly from being guided users of technology towards becoming deliberate creators and problem-solvers, a trajectory that aligns with the skills needed for NCFE Digital Functional Skills and employment-focused digital tasks.</p> <p>Within the Online/Information strand, students extend their understanding of the web from “how to be safe” to how the web works and how information is found, ranked and shaped. They learn the basics of HTML and CSS, and how search engines operate, helping them to critique online content and understand why some information appears more prominently than others – a vital step towards being critical, informed users of digital information.</p> <p>The Media strand revisits visual communication through vector graphics and simple animation, developing precision, layering, and reuse of digital assets. These skills reinforce attention to detail, layout and accessibility and provide a foundation for later work in digital graphics, multimedia products and portfolio building.</p> <p>In the Programming strand, Year 8 introduces or consolidates text-based programming (e.g. Python). Students transfer their understanding of sequence, selection, repetition and variables from Scratch/Logo and DC360 “Programming 1” into a typed language. This shift strengthens their logical thinking, resilience, and ability to read and write code that solves simple, real-world problems – stepping stones towards automation and scripting in workplace tools.</p> <p>The Computing/Systems strand returns to hardware and system architecture first met in DC360 “The Computer”, unpacking how components, operating systems and basic logic underpin everything students do on a device. In the Information/Representation strand, they deepen their grasp of data representation (text, numbers, symbols, basic binary and size units), helping them understand storage, file sizes and constraints – all essential for working efficiently with digital resources.</p> <p>Finally, through project-style units such as mobile app development or small web projects, students combine strands: user-centred design, programming logic, data and media come together in simple but purposeful digital products. This echoes the integrated tasks they will later meet in Digital Skills for Work (e.g. producing fit-for-purpose documents, web pages or dashboards for a specific audience).</p> <p>By the end of Year 8, the spiral of skills is clearly visible: online safety has become online judgement and information literacy; basic media has become designed, layered products; basic code has progressed to structured text-based programming; and understanding “a computer” has become understanding systems, data and representation. Students are increasingly able to select tools and methods themselves, a crucial step toward KS4 independence.</p>					
<p>Year 8</p>	<p>Safety & Security 2 NC Link: 2,4,6,9</p>	<p>Animation NC Link: 4, 6, 7 & 8</p>	<p>Programming 1 NC Link: 2 & 3</p>	<p>Computers & Networks NC Link: 2, 3, 4, 5, & 6</p>	<p>Spreadsheets NC Link: 1,4,6,7,8</p>	<p>HTML NC Link: 2,4,6,9</p>
	<p>Prior Knowledge</p> <p>Extending knowledge from Year 7 “Safety & Security” including netiquette, communication and recognising risks online.</p> <p>Key Knowledge</p> <p>Understanding more advanced online threats including phishing, malware, identity theft and social engineering. Developing knowledge of how personal data is collected, stored and used online. Understanding privacy settings, digital footprints and how data can be tracked. Introduction to cyber security methods used to protect systems and data.</p>	<p>Prior Knowledge</p> <p>Builds “Movie Making” Unit from transitions and effects to animating specific items.</p> <p>Key Knowledge</p> <p>How to produce several different animations including stop frame and timelapse etc. Understanding key terms such as onion skinning, frames, duration, and timings.</p> <p>Students Will:</p> <p>Learn about the different types of animation and which is best for each purpose for example timelapse and stop frame. Understand assets and then produce an animation using the</p>	<p>Prior Knowledge</p> <p>Builds on Unit “Programmers Unite!”, Unit “Programming Continued” at KS2, Unit “Logo”, Unit 16 “Games Making” at KS3 using variables.</p> <p>Key Knowledge</p> <p>How to produce a program using code including print, input, IF statements as well as variables. Being able to recall variables and then ask what is an IF statement. This builds on the understanding covered in Unit “Spreadsheets”.</p> <p>Students Will:</p> <p>Understand how to</p>	<p>Prior Knowledge</p> <p>Builds on Unit “Computers and their uses” at KS2. It’s also linked to KS3 Unit “Safety and Security” about using data on a network.</p> <p>Key Knowledge</p> <p>How to upgrade a computer (RAM, SSD, CD Drive etc). How to replace parts, how to connect external devices i.e., speakers/ printers/microphone. How to install operating systems i.e., Windows, Android, IOS and Software i.e, MS Office and games. Computer networks</p>	<p>Prior Knowledge</p> <p>Building on Unit “Logo” and Unit “Games Making” at KS3 where calculations and IF statements were covered.</p> <p>Key Knowledge</p> <p>How to use formulas (sum, average, IF, +, -, *, / etc) to ensure calculations are correct. How to make relevant auto updating graphs and charts. How to format the layout to create a professional design.</p> <p>Students Will:</p> <p>Learn, sum,</p>	<p>Prior Knowledge</p> <p>Building on Unit “Safety and Security” at KS3 on being polite and safe on the internet. Also, the formatting and fit for purpose from Unit “Word Processing”.</p> <p>Key Knowledge</p> <p>Understand what TAGS are, how they are used to create linked web pages. Understand key terms such as HTML, Java, formatting, ordered & unordered lists, TAGS, oblique, URL, image sources & Hyperlinks.</p> <p>Students will:</p> <p>Learn to develop a web page drawing</p>

	<p>Students Will:</p> <p>Develop their understanding of how to stay safe in more complex online environments. Explore how cyber attacks work and how users can protect themselves. Investigate how data is shared across platforms and the risks involved. Apply knowledge by creating informative materials such as presentations, reports or campaigns promoting online safety. Evaluate real-world scenarios involving online threats.</p> <p>Unit Objectives</p> <p>To understand more advanced online risks and threats. To understand how personal data is used and potentially misused. To understand methods used to improve cyber security. To understand the importance of privacy settings and digital footprints. To understand how to make informed decisions online.</p> <p>Unit Outcomes</p> <p>Explain different types of cyber threats such as phishing and malware. Describe how personal data is collected and used online. Explain how to manage privacy settings effectively. Identify methods used</p>	<p>assets identified as being suitable and assets the student has created. Create 3 animations, a seaside making ships, clouds, sun and lighting based on the time-of-day, change. An animated advert for "Burgers R Us" & one chosen from a list.</p> <p>Unit Objectives</p> <p>To understand AND, OR and NOT in Boolean logic. To understand what an animation is and the file formats. To understand how to create a basic gif animation using cloning the moving. To understand the importance of target audiences. To understand some advanced features of an animation package. To understand the legislation and plagiarism.</p> <p>Unit Outcomes</p> <p>Be able to use the correct Boolean logic command to narrow results. Identify the file formats for use with an animation. (SWF, GIF, AVI). To create 3 animations, showing the features of an animation package. Explain why 1 animation is suitable for some but not all. (FFP) List the uses of layering, fill, border, onion skinning and keyframes. Explain copyright and plagiarism.</p>	<p>program using print command, variables, input, IF and calculations such as +, -, / and *. DC360 teaches Python, C#, Java & Visual Basic.</p> <p>Students will write a quiz program that will check if the answer is correct and give appropriate feedback to the player.</p> <p>Unit Objectives</p> <p>To understand the potential of a programming package. To understand how to accept input from a user. To understand what a variable is. To understand basic calculations including +, -, /, *.</p> <p>To understand how decisions are made.</p> <p>Unit Outcomes</p> <p>To create a quiz using suitable programming software. Create questions that users can answer using the keyboard. Create simple calculations using code. Explain how to set the privacy settings. Create an IF Statement which makes d</p>	<p>and saving online.</p> <p>Students Will: Learn to identify internal parts of a computer such as RAM, CPU, SSD, CD drive etc. Attach peripheral devices such as a printer, speakers, web cams, microphones etc and install an OS such as windows & software such as office & games. We learn how a network works and how to connect to the internet.</p> <p>Unit Objectives</p> <p>To understand how a computer works including memory and ports. To understand the importance of software including operating systems. To understand the basics of binary. To understand processors, cores, and memory. To understand Hardware (I-O-S) including what peripheral devices are. To connect to the internet and what a network is.</p> <p>Unit Outcomes</p> <p>To create a poster, to show how a computer works. Identify software and operating systems and the differences. Explain what binary is and how it works. Explain how processors, cores and memory affect performance. Explain what I-O-S means. List and explain peripheral devices.</p>	<p>average, IF formulas, +, -, / and *. They will learn how to create graphics and charts. Students will learn which graphs and charts are best for each task. Comparison charts are also used to compare data.</p> <p>Unit Objectives</p> <p>To understand the potential of spreadsheets. To understand the use of formulas in a spreadsheet to perform calculations. To understand when to use an IF statement. To understand how to create and interpret a range of graphs. To understand how to link sheets, documents, and sort rows.</p> <p>Unit Outcomes</p> <p>To create a "Spreadsheet", to show the potential formulas. Identify formulas and use them to Add, Subtract, Multiply, Divide. Explain the uses of an IF Statement. Create a range of graph types and analyse the results. Explain and create links to other documents, then sort rows A-Z.</p>	<p>on previous knowledge of netiquette. Learn basic HTML, TAGS and TABS. Students create a help page which includes links, images, formatting text, adding bullets. Students learn basic java script which can be built on in Unit "Programming 1".</p> <p>Unit Objectives</p> <p>To understand HTML by creating a web page using TAGS (on/off). To understand the difference between headers and bodies. To understand how to create a table. To understand how to create two list types. To understand and be able to create hyperlinks.</p> <p>Unit Outcomes</p> <p>To create a webpage in HTML using notepad with TAGS. Identify Headers and bodies and explain the difference. Create a table using rows and columns in HTML. Create bullet and numbered lists using HTML. Explain what a hyperlink is and create one. Add images an</p>
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	to improve security.			Explain how to connect to the internet and what a network is.		
Year Group 9	Term One	Term Two	Term Three	Term Four	Term Five	Term Six
Intent of Study	<p>In Year 9 at SAIL, computing aims to consolidate and extend everything learned from DC360 primary and Years 7–8, giving students the confidence and applied experience they need before moving into NCFE Digital Functional Skills (Entry 3, Level 1, Level 2) and Digital Skills for Work at KS4. The Year 9 curriculum deliberately returns to familiar strands but expects students to work more independently, think critically, and connect their learning to real-world digital tasks.</p> <p>In the Programming strand, students deepen their work in Python (and/or similar languages) by handling sequences of data, lists, strings and more complex logic. They design small programs that process and validate data, provide feedback to users, and automate simple tasks. This mirrors the kinds of problem-solving they will later be expected to demonstrate in Functional Skills contexts, such as manipulating information or checking inputs for errors.</p> <p>The Media strand revisits digital graphics and animation, now focusing on longer, more polished products that require planning, asset creation and editing skills. Students apply principles of design, audience and accessibility developed earlier in KS3 to create short animations or interactive media pieces, giving them practice in following a brief and evaluating whether their product is “fit for purpose”, a key idea in vocational and workplace-oriented qualifications.</p> <p>In the Data/Information strand, students move beyond simple spreadsheets to data science and databases: collecting or selecting data, cleansing it, visualising patterns, and using simple queries to answer questions. They begin to understand how data is used to make decisions in everyday life, from surveys to recommendation systems. This directly supports the data-handling and problem-solving components of Digital Functional Skills and prepares them to work confidently with tables, charts and basic database tools.</p> <p>The Computing/Representation strand revisits binary and data representation from earlier years, extending it to images, sound and compression. Students explore how everyday media (photos, music, video) is stored, transmitted and transformed. Alongside this, a dedicated Cybersecurity / Online Safety strand builds on the Safety & Security units from DC360 and earlier SAIL work, now introducing legal, ethical and technical perspectives on protecting data and systems.</p> <p>Finally, applied and project-based work, such as physical computing or integrated multimedia projects, allows students to bring together programming, data, media and problem-solving in tangible artefacts. They are encouraged to plan, test, refine and evaluate their work, mirroring the cycle of planning, creating, checking and improving that they will follow in KS4 digital qualifications and in the workplace.</p> <p>By the end of Year 9, the spiral of skills across KS3 is complete:</p> <p>Online safety → information literacy → cybersecurity and digital responsibility. Simple media → structured vector/animation → designed products and portfolios. Block-based coding → text-based programming → data-driven and applied programming. Basic “what is a computer” → systems and networks → representation, storage and security. Simple data handling → spreadsheets and basic analysis → data science and databases.</p> <p>Students enter KS4 ready to tackle NCFE Digital Functional Skills (Entry 3–Level 1) and Digital Skills for Work (level 2) with a broad, coherent experience of computing. They can use common applications effectively, understand how digital systems behave, think logically about problems, and communicate and collaborate safely and professionally online.</p>					
Year 9	Safety & Security 3	Graphics	Programming 2	Binary & Pixel Image	Kiosk	Database
	NC Link: 2,4,6,9	NC Link: 2, 3, 4, 5, & 6	NC Link: 2 & 3	NC Link: 2, 3, 4, 5, & 6	NC Link: 1,4,6,7,8	NC Link: 2,4,6,9
	Prior Knowledge	Prior Knowledge	Prior Knowledge	Prior Knowledge	Prior Knowledge	Prior Knowledge
	Extending knowledge from Year 7 and Year 8 “Safety & Security” including online behaviour, cyber threats, privacy and data protection.	This builds on Unit “Logo”, where we first used shapes and basic drawing techniques. It also builds on Unit “Animation”, for shapes and Unit “Kiosk” where we designed graphics for a touch screen system.	This builds on Unit “Programming 1” where we covered variables, calculations and basic IF decision statements.	This builds on Unit “The Computer”, where we looked at building a computer and how a computer functions by understand how a computer processes data and performs calculations.	Understand hyperlinks from KS3 Unit “HTML” and Unit “Movie Making” and Unit “Animation”, where we are exporting. We also recall URL fields from Unit “Database”.	Relating back to KS2 Unit “Programming Continued”, where data is discussed and KS3 Unit “Word Processing” where a mail merge is created with a database of fields.
	Key Knowledge	Key Knowledge	Key Knowledge	Key Knowledge	Key Knowledge	Key Knowledge
	Understanding advanced cyber security concepts		How to produce a program using code. Recap a variable and then ask what is a nested IF statement,		To understand what an interactive system with	

	<p>including encryption, authentication and secure networks. Exploring legal and ethical issues such as data protection laws and computer misuse. Understanding how large systems store, process and protect data. Recognising the impact of cybercrime on individuals and organisations.</p> <p>Students Will:</p> <p>Investigate how security methods such as encryption and authentication work. Analyse case studies of data breaches and cyber attacks. Understand legal frameworks such as data protection regulations. Evaluate the ethical implications of using technology. Create detailed reports or presentations analysing security risks and solutions.</p> <p>Unit Objectives</p> <p>To understand advanced methods used to secure data and systems. To understand legal and ethical responsibilities when using technology. To understand how data is protected in large systems. To understand the impact of cybercrime. To understand how to evaluate and respond to security risks.</p> <p>Unit Outcomes</p> <p>Explain security methods such as encryption and</p>	<p>To develop the skills to manipulate images using a wide range of graphic techniques including Crop, Cut, Opacity, Rotate, Blur, Clone, Layering, Text, Bulge and Pinch, Mesh, Warp, Sharpen, Sepia and more. Students will understand key knowledge such as Raster and Vector as well as the differences. They will look at which image format is best for each specific intended purpose.</p> <p>Students Will:</p> <p>Learn how to re-colour, resize, crop, clone, rotate, using opacity, gradients, lighting effects, and more. Posters, notices, signs, book/DVD covers, wrappers and more are covered in this unit. Create images that gradually get more tricky ending by putting several images into one graphic. Putting a boy in a jar, selfie on holiday, sand marks in the beach, space scenes and more.</p> <p>Unit Objectives</p> <p>To understand the potential of a graphics package. To understand the importance of final usage. To understand the importance of addressing the target audience. To understand some advanced features of graphics packages. To understand legislation and plagiarism.</p> <p>Unit Outcomes</p>	<p>building from Unit "Logo" or Unit "Games Making", where students either did games making or Logo programming and sets of instructions were followed. Unit "Control Systems", where we looked at flowcharting a set of instructions and procedures, making specific decisions which cause actions to happen. Unit "Programming 1", where we started to look at programming in our chosen language developing basic programming skills such as input, variables and basic IF statements.</p> <p>Students Will:</p> <p>Learn to program by creating a quiz that will check if the answer is correct and award or remove points. This will build on the skills that were covered in Unit "Programming 1" where the basics of the quiz program were made. We will look at how the data can be stored. Further development of the quiz game made in Unit "Programming 1", by adding additional features. Students will add options, develop feedback, improve the scoring system. Students will save program data to a basic file format.</p> <p>Unit Objectives</p> <p>To understand the potential of programming. To understand the use of passwords. To understand the need for the random function.</p>	<p>How to count in binary and how to perform calculations such as addition. This is aligned to Unit "The Computer", where we looked at how the internal parts of a computer system work and how data is stored with 0's and 1's.</p> <p>Students Will:</p> <p>Learn to count in binary and then add 2 binary numbers together. Student will learn how 1 for on and 0 for off relates to the workings of a computer. Students perform binary calculation tasks, which will automatically mark. The tasks show them a way that will allow them to work out binary number and add binary numbers together.</p> <p>Unit Objectives</p> <p>To be able to create an icon using binary. To understand what binary numbers are. To understand how to convert binary to denary. To understand how to add binary numbers together.</p> <p>Unit Outcomes</p> <p>Create an icon using binary numbers. Identify the binary numbers and explain their meanings.</p>	<p>buttons is. Key elements such as interaction, images, sound, accessibility, and animation. Building on previous Units "HTML", where we built a website with links to other pages. Understanding the key term hyperlink. We build on this as we have internal as well as external links. Unit "Animation", where we looked at bespoke animations that can be included in a Kiosk system or standalone. We build on this by looking at transitions and internal animation. and Unit "Databases", where we had hyperlink field types.</p> <p>Students Will:</p> <p>Create an interactive touch screen kiosk system which will include animation, sound, interactive buttons, images, transitions, and videos. Create a touch screen system in two parts. Part one is called "About Me". Students tell us about themselves, hobbies, interests etc. Part two is a game with a scoring system. Question can be based on the "About Me", slides to check they were read or on any other sensible topic.</p> <p>Unit Objectives</p> <p>To understand AND, OR and NOT in Boolean logic. To understand the potential of a presentation including a kiosk system. To understand its intended</p>	<p>Understand what Fields, Records, Tables, Forms, Buttons, Queries, Reports, and Macros are. Building on Unit "Safety and Security", where we looked at data protection and how it's stored, "Word Processing", where we looked at formatting, this will be key for error messages and data input forms, and "HTML", where we looked at HTML links to websites. We will also build on "Spreadsheets", where we look at formulas and including > greater than, < less for conditions using a type of IF statement and we will look at decimal places and currency.</p> <p>Students Will:</p> <p>Develop a database with tables consisting of fields and records. They will use data types and create queries, forms, and reports. They will create an interface called a switchboard allowing users to add, remove & question the data.</p> <p>Create a fruit database consisting of fields, with lookups, forms with buttons, a table of data, multiple queries and reports neatly created.</p> <p>Unit Objectives</p>
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	<p>authentication. Describe legal and ethical issues related to computing. Analyse the impact of cybercrime on society. Evaluate different security measures and their effectiveness. Produce a reasoned response to a real-world cyber security scenario.</p>	<p>Identify the file formats and DPI for a specific use. Explain why one graphic would be suitable for some but not all. List and use Layering, fill and border and blending options. Explain copyright and plagiarism.</p>	<p>To understand the differences between reading and writing to a file. To understand how to create code that reads and writes to a file.</p> <p>Unit Outcomes</p> <p>Create "Guess a Number Game", showing programming potential. Identify the importance of passwords, create a password login system. Explain how the random number code works. List the definitions of both read and write in the code. Explain by creating code that reads and writes to a file.</p>	<p>Perform calculations converting binary to denary. Be able to add binary numbers together.</p>	<p>use. To understand the importance of final usage. To understand the importance of addressing a target audience. To understand some advanced features of a presentation package. To understand the legislation and plagiarism.</p> <p>Unit Outcomes</p> <p>Be able to use the correct Boolean logic command to narrow results. Create a Kiosk, to show the benefits of a Kiosk System. List the dangers that can be faced online. Identify the file formats for use with a Kiosk System. (PDF, PPS, PPT) Explain why one Kiosk would be suitable for some but not all. (FFP) List use Hyperlinks, Sound, Kiosk Mode, Transitions Animation. Explain copyright and plagiarism.</p>	<p>To understand the potential of a database system. To understand the importance of Data Types. To understand the importance of ease of use for the end-user. To understand some queries, basic and advanced. To understand the importance of data output.</p> <p>Unit Outcomes</p> <p>Create a database, to show the benefits of a database system. Identify data types such as Text, Boolean, Integer, Decimal, Memo etc Explain ease of use by creating data input forms with interactive buttons. List some query code creating queries to allow the use of the database. Explain the importance of data output by creating reports on queries.</p>
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Year Groups 10 & 11

<p>Intent of Study</p>	<p>In Years 10 and 11 at SAIL, the computing curriculum is designed to build directly on the foundations established at KS3 and the Deliver Computing 360 (DC360) programme, moving students from supported use of digital tools towards confident, independent application in real-world contexts. By the end of Year 9, students have developed a broad understanding of the key strands of computing including online safety, digital communication, media creation, programming, systems, and data handling and have revisited these areas through a carefully sequenced and progressively challenging curriculum.</p> <p>At KS4, this knowledge is applied and extended through three complementary qualifications: NCFE Digital Functional Skills Entry Level 3, NCFE Digital Functional Skills Level 1, and NCFE Digital Skills for Work (Level 2). Together, these courses provide a clear and structured pathway that supports students of varying starting points while ensuring progression towards independence, accuracy and employability.</p> <p>Across these qualifications, students revisit and develop core topic areas first introduced at KS3. These include: using devices and handling information, creating and editing digital content, digital communication, using online services and transactions, and staying safe and responsible online. As students progress, these topics are explored with increasing depth, complexity and independence, ensuring continuity with earlier learning while preparing them for practical application.</p> <p>The Entry Level 3 Digital Functional Skills course consolidates the core skills introduced at KS3, focusing on building confidence in essential areas such as managing files, producing simple documents, communicating appropriately using email and messaging, accessing online services, and understanding how to stay safe online. This stage ensures that all learners can securely access and apply fundamental digital skills in structured and supported contexts.</p>
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The Level 1 Digital Functional Skills course builds directly on this foundation by increasing the level of challenge and independence required. Students develop their ability to create more complex digital content, select appropriate tools for tasks, manage and interpret information, and communicate effectively in a range of contexts. They are expected to make decisions, solve problems, and apply their skills across different scenarios, reflecting more realistic use of technology.

Finally, the Digital Skills for Work (Level 2) qualification moves learning into a more applied and vocational context. Students combine their knowledge and skills to complete purposeful, real-world tasks such as producing professional documents, managing and analysing information, collaborating digitally, and understanding workplace expectations around communication and data security. There is a strong emphasis on producing work that is fit for purpose, mirroring real employment scenarios and reinforcing the importance of accuracy, clarity and audience awareness.

The three qualifications are deliberately sequenced to provide progression from foundation → independence → application, ensuring that students not only develop technical competence but also the ability to use digital tools critically, responsibly and effectively. Core themes such as online safety evolve into a deeper understanding of cybersecurity and responsibility, while earlier work on documents, media and data becomes applied, purposeful and audience-driven.

Due to the varied starting points and individual needs of learners at KS4, and the flexible nature of the NCFE qualifications, the curriculum is not delivered as a fixed, term-by-term sequence. Instead, content is adapted and revisited as required, allowing students to progress through Entry Level 3, Level 1 and, where appropriate, Digital Skills for Work at a pace that reflects their individual progress. This adaptive approach ensures that all students are supported, challenged and able to achieve meaningful outcomes.

By the end of Year 11, students leave SAIL with a coherent and practical digital skillset. They can confidently use digital devices, create and adapt content, handle and interpret information, communicate effectively in digital environments, and make informed decisions about online safety and data. This prepares them for further education, training, or employment, equipped with the digital competencies required in modern life and the workplace.