5ir Thomas	Wharton Academ

INVEST EXPERIENCE EXPLORE SHAPE GROW PURSUE in the power of the written word a range of cultures, histories and beliefs the shared values of civilisation society and our place within it as instinctive readers, writers and orators English beyond the classroom Curriculum Sequencing Grid 2025-2026 Subject Computer Studies Year Term 2 Term 1 Term 3 HT1 HT2 HT3 HT4 HT5 HT6 1. Digital Literacy 3. Digital World 8. Computer Systems Component 5. Spreadsheets 6. Introduction to Business 7. Micro:Bit 3. Digital World 4. iDEA 2. Bebras UK By introducing practical spreadsheet skills that are essential in many By fostering digital literacy and an understanding of the foundational tools By equipping them with essential digital literacy skills needed to navigate By introducing them to foundational concepts in business and By introducing them to foundational programming concepts and the By introducing them to the fundamental components of a modern equired in modern workplaces. Learning to navigate tools like Office 365. modern society. By understanding social networking and its impacts, pupils odern careers, from data analysis to business management. Learning to entrepreneurship, offering them a taster of KS4 Business Studies, By physical computing of the Micro:Bit. By exploring embedded systems. computer, the concepts of hardware and software. This gives students a SharePoint, and OneDrive equips students with practical skills for academic and professional success. By exploring email etiquette and online search gain insights into responsible digital interactions and the societal role of technology. Lessons on online risks foster critical thinking, teaching create and format spreadsheets teaches students how to organise and present data effectively, a vital skill in today's data-driven world. By exploring real-world entrepreneurial skills such as risk-taking, time nanagement, and pitching ideas, pupils gain insight into how businesse pupils gain insight into how hardware and software interact to create ctional devices, an essential understanding in today's technology-drive depth of understanding into the devices they use and carry around each day. A practical hands-on experience of breaking down a computer techniques, pupils develop an appreciation for effective communication students how to stay safe and informed in an increasingly digital world exploring the use of charts, pupils gain the ability to visualise complex e created and sustained. Designing promotional materials and practising world. Working with the Micro:Bit not only introduces students to coding viually looking at components gives and appreciation of the technology and research, critical in today's digital society. Additionally, introducing Additionally, exploring Al's applications and ethical concerns introduces ormation, enhancing their communication and decision-making abilities. presentation skills prepare pupils for careers that require creativity and out also allows them to apply these skills in tangible ways, such as creating **Developing Cultural** students to the importance of collaboration tools, responsible online pupils to cutting-edge technology shaping global industries. This Additionally, applying spreadsheet skills to real-world scenarios like market public speaking. Additionally, these lessons highlight the importance of animations on an LED matrix or developing interactive programs. This pehavior, and efficient computer usage emphasizes the cultural relevance of technology in personal and professional life. Understanding these skills knowledge not only enhances their awareness of future opportunities bu also prepares them to engage thoughtfully with emerging technological ales or athletics performance fosters an understanding of how technology is used to solve everyday problems, preparing pupils for professional stomer awareness and market trends, connecting classroom learning to e real-world challenges of running a business, thus equipping pupils with hands-on experience fosters problem-solving and creativity, preparing students for future opportunities in fields like engineering, robotics, and Capital within the context of broader technological advancements helps students environments and enhancing their employability skills they can carry into further education and the workplace computer science. appreciate the role of innovation in shaping society and the global workplace. uhstantive Knowledge: Substantive Knowledge hstantive Knowledge Substantive Knowledge Substantive Knowledge Rules for using a computer lab, including logging on and equipment care >Understanding what social networking is and the functionality of popula Spreadsheets are used for storing information and performing Reasons for starting a business, including independence, profit, and Definition and purpose of iteration in programming, including Definition of Hardware Identifying computer components (e.g., keyboard, mouse, desktop)
Using the Start Menu to access files and programs
Functions of Microsoft Word, Excel, PowerPoint, and Edge apps like TikTok, Instagram, and Pinterest aking an idea a reality nditional, continual, and count-controlled iteration Definition of Software Identifying online risks such as catfishing, online abuse, malware, and • Key spreadsheet components: cells, rows, columns, labels, and values Definitions of goods (tangible items) and services (intangible processes Inderstanding embedded systems like Micro:Bit and Arduino, and their Component lists of the computer nisinformation Introduction to formulas (e.g., =A2+B2) and functions (=SUM(A1:A5), Key skills and characteristics of entrepreneurs, such as confidence, riskse in dedicated functions Purpose of the CPU AVFRAGE, etc.) ccessing lesson files via SharePoint and storing work on OneDriv Understanding the types of malicious software (e.g., worms, spyware ing, and problem-solving Roles of input devices (e.g., buttons on the Micro:Bit) and output device urpose of the Motherboar The influence of customer needs and wants on business decisions, Email etiquette, including proper formatting and behavior viruses) and how to identify suspicious messages Formatting spreadsheets, including font styles, borders, and adjusting e.g., LED matrices) in computing Purpose of RAM Using Google search operators for refining online searches Keyboard shortcuts (e.g., Copy, Paste, Undo, Redo) >Learning how Artificial Intelligence (AI) works, including concepts like machine learning, deep learning, and AI's application in sectors like cluding demographics and consumer trends Steps for creating a product pitch, including identifying the target Basic programming constructs like loops, variables, and IF statements, and their role in executing specific tasks lumn widths for clarity Purnose of Secondary stores Types of charts: bar charts, pie charts, and line charts, and their purpos creenshot methods: Print Screen, Snipping Tool, PowerPoint Screensh healthcare and energy (e.g., visualising trends, comparing data) idience, setting a price, and deciding on promotional methods Features and functions of the Micro:Bit, including its sensors, buttons, Disciplinary Knowledge Exploring the ethical impacts of AI, including privacy concerns, job Designing promotional materials like leaflets to market a product nd LED matrix for creating interactive programs splain how the components in a computer interact and communicate riting professional emails with proper structure and etiquette displacement, and bias in AI systems Creating and editing spreadsheets by adding and deleting data, adjusting Disciplinary Knowledge: Functionality of tools like random number generators in programming to Explain how to put a computer together and the parts inside nderstanding what impact on performance does each part have Organizing work using folders in OneDrive Refining searches using advanced Google operators ormatting, and using cell references in formulas

Using functions to automate calculations, such as totals and averages Analysing the reasons behind starting a business and categorising notivations Disciplinary Knowledge: >Analysing the benefits and drawbacks of social networking platforms an Substantive Knowledge/ Disciplinary Knowledge Anniving keyboard shortcuts to improve efficiency discussing their societal impact Designing and interpreting data visualisations like har nie and line charts Differentiating between goods and services using real-world examples thout needing physical hardware esigning posters with PowerPoint to showcase skill: Evaluating and ranking risks based on scenarios, with a focus on safety reating a product pitch and mood board by identifying customer need: Navigating and using Office tools to complete tasks measures for online interactions Developing spreadsheet solutions for real-world scenarios, such as d business strategies Applying iteration types (conditional, continual, and count-controlled) to Jsing "Save As" to save to OneDrive >Practising how to protect against online risks by implementing safety measures like reporting suspicious messages and using antivirus software. naging sales data for a market stall or recording athletic performance Designing and evaluating leaflets with key product details, including lve problems programmatically Designing and testing programs on embedded systems like the Micro:Bi cing, benefits, and branding >Discussing the ethical dilemmas posed by AI, including decision-making Practising presentation skills, including how to engage an audience and sing its input and output capabilities onomous cars and biases in AI systems iver a persuasive pitch Debugging and refining code using simulators to observe behavior and >Researching and presenting how AI is used in various industries while orrect errors without physical hardware ncorporating programming constructs such as IF statements and loops to ouild responsive, dynamic programs Using random number generation to create unpredictable behaviors in rograms, such as games Exploring and understanding how hardware like the Micro:Bit interacts ICT Usuage in all careers and subjects E-Saftey **Cross Curricular Links** ICT Business Computer Science Computer Science Social Networks Topic 1 Topic 3 Topic 3 Topic 2 Topic 5 Topic 6 Topic 7 Topic 8 Topic 4 Glossary Glossary Glossary Glossary Glossary Glossary Glossary Glossary Glossary Vocabulary Topic 2 SPA Assessments Topic 1 SPA Topic 4 SPA Topic 5 SPA Topic 5 SPA Topic 6 SPA Rahras Online Test