CHRIST'S COLLEGE, SUNDERLAND
Emmanuel Schools Foundation

Computing Curriculum Overview 25-26

	Autumn Term		Spring Term		Summer Term	
	Half Term 1	**Half Term 2**	**Half Term 3**	**Half Term 4**	**Half Term 5**	**Half Term 6**
R	**Online Safety** An introduction to using an electronic device.	**Creating with Materials** Exploring pattern making, creating and recording ideas.	**Technology Around Us** Exploring how things work, including design and role play.	**Creating with Materials** Exploring logical reasoning, giving instructions and sequencing.	**Communication and Language** An introduction to digital literacy skills.	**Creating with Materials** Collaborative work to create and debug maps relating to surroundings.
Year 1	**Coding** Project A – Code.org. Program using commands. *Online Bullying*	**Creating Media** Digital Drawing – use tools to create digital paintings (JIT5). *Copyright and Ownership*	**Programming** Moving a Robot – explore using individual commands. *Managing Online Information*	**Creating Media** Digital writing – use a computer to create and change text. *Privacy and Security*	**Programming** Intro to Animation – introduction to on-screen programming (Scratch Jr). *Online Relationships/ Reputation*	**Computer Systems** Technology Around Us – understanding technology and how it can help them in everyday lives. *Self-Image and Identity*
Year 2	**Coding** Project B – Code.org. Repeated pattern making. *Self-Image and Identity*	**Photos - iPads** Creating Media with Photographs – recognise that different devices can be used to capture photographs and gain experience capturing, editing, and improving photos. *Online Bullying*	**Programming** Robot Algorithms – instructions in sequences and the use of logical reasoning to predict outcomes. *Privacy and Security*	**Creating Media** Digital Music – make patterns and use those patterns to make music with both percussion instruments and digital tools. *Managing Online Information*	**Programming** Introduction to Quizzes – understand that sequences of commands have an outcome and make predictions. *Online Relationships/ Reputation*	**Computer Systems** IT Around Us – understanding of what information technology (IT) is and identifying examples. *Copyright and Ownership*

Year 3	**Coding** Project C – Code.org. Sequencing. Build as you go programming. Debugging code. Creating art with code. *Online Bullying*	**Desktop Publishing** Creating Media – use desktop publishing software and consider careful choices of font size, colour and type to edit and improve premade documents. *Copyright and Ownership*	**Scratch** Sequencing – explore the concept of sequencing in programming through Scratch. *Self-Image and Identity*	**Stop Motion Studio** Stop Frame Animation – use a range of techniques to create a stop-frame animation using tablets. *Privacy and Security*	**Scratch** Events and Actions – explore the links between events and actions within programming. *Online Relationships/ Reputation*	**Databases** Branching Databases – develop understanding of what a branching database is and how to create one. *Managing Online Information*
Year 4	**Coding** Project D – Code.org. Sequencing. Build as you go. Conditional formatting. Looping. *Privacy and Security*	**Audio Production** Podcasts – discuss ownership of audio, recording and producing your own audio (Garage Band). *Online Bullying*	**Turtle** Repetition in Shapes – create programs by planning, modifying, and testing commands to create shapes and patterns. *Managing Online Information*	**Photo Editing** Creating Media – develop understanding of how digital images can be changed and edited. *Copyright and Ownership*	**Scratch** Repetition in Games – explore the difference between count-controlled and infinite loops and modify existing animations and games using repetition. *Online Relationships/ Reputation*	**Computer Systems** The Internet – appreciate the internet as a network of networks which need to be kept secure. *Self-Image and Identity*
Year 5	**Coding** Project E – Code.org Looping. Functions. Conditionals. *Privacy and Security*	**Vector Drawing** Vector Drawing – create vector drawings using different drawing tools to create images. *Online Bullying*	**Programming with micro:bits** Physical Computing – explore the concept of selection in programming. *Online Relationships/ Reputation*	**Video** Creating Media – creating videos through capturing, editing and manipulating videos. *Copyright and Ownership*	**Scratch** Selection in Quizzes – learning how the 'if... then... else...' structure can be used to select different outcomes depending on whether a condition is 'true' or 'false'. *Managing Online Information*	**Computer Systems** Sharing Information – understand computer systems and how information is transferred between systems and devices. *Self-Image and Identity*

Year 6	**Coding** Project F – Code.org. Variables in different contexts. *Online Bullying*	**Tinkercad** 3D Modelling – gain knowledge and understanding of using a computer to produce 3D models. *Copyright and Ownership*	**Scratch** Variables in Games – explore the concept of variables in programming through games in Scratch. *Managing Online Information*	**Websites** Web Page Creation – create and identify a good web page, including copyright issues. *Self-Image and Identity*	**Programming with micro:bits** Sensing – use previous learning to utilise a physical device. *Online Relationships/ Reputation*	**Spreadsheets** Data and Information – organise data and use formulas to produce calculated data. *Privacy and Security*
Year 7	**Digital Media** *Effective Use of Tools & Safety and Security*	**Digital Media / Networks** *Networks & Computing Systems*	**Networks / Scratch – Part I** *Algorithms & Programming*	**Scratch – Part I / Spreadsheets** *Effective Use of Tools & Creating Media*	**Spreadsheets / Scratch – Part II** *Algorithms & Programming*	**Scratch – Part II** *Algorithms & Programming*
Year 8	**Computing Architecture** *Computing Systems*	**Computing Architecture / Binary** *Data and Information*	**Binary / Representing Data** *Computing Systems*	**Representing Data / Cybersecurity** *Impact of Technology & Safety and Security*	**Cybersecurity / Intro to Python** *Algorithms & Programming*	**Intro to Python** *Algorithms & Programming*
Year 9	**Advanced Spreadsheets** *Algorithms & Programming*	**Advanced Spreadsheets / Business Project** *Effective Use of Tools & Creating Media*	**Business Project** *Effective Use of Tools & Creating Media*	**Game Development** Algorithms & Programming	**Game Development / User Interface Design** *Effective Use of Tools & Creating Media*	**User Interface Design** *Effective Use of Tools & Creating Media*
Year 10	**Component 1: User Interface Design** *Effective Use of Tools & Creating Media*	**Component 1: User Interface Design** *Effective Use of Tools & Creating Media*	**Component 2: Spreadsheets** *Data and Information & Programming*	**Component 2: Spreadsheets** *Data and Information & Programming*	**Component 2: Spreadsheets** *Data and Information & Programming*	**Component 3: Digital Working Practices Exam** *Impact of Technology*

Year 11	**Component 3:** **Digital Working** **Practices Exam** *Impact of Technology*	**Component 3:** **Digital Working** **Practices Exam** *Impact of Technology*	**Component 3:** **Digital Working** **Practices Exam** *Impact of Technology*	**Component 3:** **Digital Working** **Practices Exam** *Impact of Technology*	End of Option	End of Option