Year 8 Computer Science Curriculum Plan							
Component 1	Core		Hinterland		NC Coverage	Assessment	Whole Education Opportunities
	Knowledge	Skills	Knowledge	Skills			
(Autumn Term 1 & 2) **Programming (Python) - CS**	• Introduction to python • Operators • Input / variables • Data types • selection	• Writing programs using the concept of:- 1. Sequence 2. Selection 3. Iteration 4. functions	• System analysis • Computational solutions	• Using flow charts in sequencing way to solve problem • Developing, testing, and evaluating programs.	• 4CC2 • 4CC3 •	• End of topic assessment • PR point assessments •	• SMSC- students to explore and develop their thought pattern. • Building their 5C's-character, confidence, creativity, communication, and community
Modelling Data (Spreadsheet) -IT	• Introduction to spreadsheet • Collecting of data • Quick calculations • Mastering data manipulation	• Develop understanding of formatting features of spreadsheet • Collecting data for decision making • Analysing data by creating and using charts		• Drawing up a budget • Storing and manipulating data to make informed decision			
(Spring 1&2) **Presentation? E-Safety -IT**	• Basic knowledge of PowerPoint • PowerPoint presentation templates • Cyberbullying • Digital footprint	• Creating presentation slides using slide master • Incorporating text boxes, shapes, images, colours in a presentation. • Develop understanding of the issues with online sites such as social networking sites and cyberbullying.	• Protecting yourself • Avoiding posting of personal information online	• Information technology and digital literacy skills.	• 4CC1 • 4CC2 • 4CC3	• PLC • End of topic assessment • PR point assessments	• SMSC- Avoid bullying people online. Students considering the environmental issues of misuse and access rights to personal data • Computational thinking is applicable to all subjects
Data Representation – CS	• Binary, decimal, and hexadecimal conversions • ASCII character coding • How computer represent • Boolean logic • Logic gates	• Representing numbers by binary and hexadecimal notations. • Compressing of data • Explore the conversion of binary digits for signal representation • Use an ASCII table to decipher an encoded message written in binary	• Analysing numeric data • Statical knowledge	• Digital encoding • Encoding website images			
Summer Term 1 & 2) **Computers (Hardware / Software) -CS**	• System architecture • The CPU and fetch-Execute-Cycle • Memory • Secondary storage	• Differentiating between hardware and software devices. • Calculating capacities of memory and storage devices. •	• Awareness of general computer systems	• Computer literacy			
Web Development -IT	• Introduction to web development • Introduction to HTML Tags • Introduction of CSS	• Creating HTML tags • Creating CSS tags • Formatting activities using HTML tags	• Technology that makes up the internet.	• Website development			

		• Interpreting html and CSS codes					