Year 13 Computer Science Curriculum Plan							
Component 1	ent 1 Core Hinterland		terland	NC Coverage	Assessment	Whole Education	
	Knowledge	Skills	Knowledge	Skills			Opportunities
(Autumn Term 1 & 2)							 SMSC- ethical and cultural issues
Design & Development of the solution	 How to decompose a problem How to describe a problem How to describe approach to program testing 	 Breaking down problems into small sub problems using flow charts or pseudocode. Categorise problems using computational methods Designing computational solution to a problem 	System development	Coding	• 4CC2 • 4CC3		
Evaluation	 Evaluation of solution Maintenance and development 	 Testing to inform evaluation 	System Analysis				
Exchanging Data	 Normalization Relational databases Referential integrity Structural Query Language 	 Create different normalisation forms Create table structures and validations on data Create queries and reports 					
(Spring & Summer Term)						•	
Boolean Algebra	 Logic gates and truth tables 	 Manipulate Boolean and Karnaugh maps expression 		Interpret Boolean expressions	 4CC1 4CC2 4CC3		 SMSC- this encourages students, to explore

	 Simplifying Boolean expressions Karnaugh maps Adders and D-Type flip-flips 	 Simplify Boolean expression Draw logic gates Derive statements in Boolean algebra 			
Networks web technologies	 Structure of the internet Internet communication Network security and threats HTML and CSS Web forms and JavaScript Search engine indexing Client-server and peer-to-peer 	 Design client -server and peer-to-peer topology Develop a website using html and CSS tags. Explain the advantages and disadvantages of network communications 	 Mobile network technologies of 3G, 4G AND 5G 	• Surfing on the internet using	
Data Types	 Primitive data types ASCII and Unicode Binary arithmetic Floating point arithmetic Bitwise manipulation and masks 	 Define primitive data types Represent positive integers in Binary Using sign and magnitude and two's compliment to represent negative numbers in binary Use character set to represent text 			

•	and develop their thought pattern 3C's-character, confidence, creativity, contribution, community