MAGHULL HIGH SCHOOL – CURRICULUM MAP



HALF TERM 1.2	Week 8-9	Week 10	Week 11-12	Week 12	Week 13	Week 14 & 15
Nov - Dec						
TOPIC (S)	1.4 Systems software	Dedicated	1.5 Application	Dedicated	1.6 Software	Dedicated
		programming skills	generation	programming skills	development	programming skills
Knowledge & Skills	Why do computers	Gain experience in	In what ways do	Gain experience in	How are large scale	Gain experience in
development	need an operating	practical	typical businesses use	practical	programming	practical
	system like	programming using	applications	programming using	projects undertaken?	programming using
	Windows/Linux/macOS?	TIME model	software?	TIME model	What are the	TIME model
	How does a computer		How do utilities help		advantages and	
	handle running out of		to keep your		disadvantages of	
	memory and why does		computer safe and in		each development	
	it slow down?		working order?		methodology?	
	What causes an		What are the		What techniques,	
	interrupt to the CPU		considerations for a		skills and tools can	
	and how is it handled?		school between		we use to help us	
	From all the open		choosing an open or		write and follow	
	programs in memory,		closed learning		algorithms?	
	how does the CPU		platform?			
	decide which process to		How does a program			
	execute?		become the binary			
	What are the features		code that a computer			
	of different types of		can execute?			
	operating system?		What happens during			
	What is the relationship		the different phases			
	between these terms:		of compilation?			
	BIOS, ROM, CMOS,		What is the purpose			
	POST, bootstrap and		of a linker and			
	kernel?		loader? What are the			
	What is the purpose of a		advantages of			
	aevice ariver?		function libraries to a			
	what is a virtual		programmer?			
	machine?					

Assessment /	Classroom activity -	Classroom activity -	Classroom activity -	Classroom activity -	Classroom activity -	Classroom activity -			
Feedback	, Class Discussion -	, Class Discussion -	, Class Discussion -	, Class Discussion -	, Class Discussion -	, Class Discussion -			
Opportunities	Questioning pupils –	Questioning pupils –	Questioning pupils –	Questioning pupils –	Questioning pupils –	Questioning pupils –			
	verbal feedback – exam	verbal feedback	verbal feedback –	verbal feedback	verbal feedback –	verbal feedback			
	questions		exam guestions		exam questions				
Cultural Capital	Problem solving								
•	Impact of technology on the world								
SMSC / Promoting	Listening to others								
British Values	Responding suitable in discussions								
(Democracy, Liberty,	Taking part in group activates								
Rule of Law,									
Tolerance &									
Respect)									
Reading	Key word Identification								
opportunities	Decomposition and Abstraction								
	Clean Code: A Handbook of Agile Software Craftsmanship								
	The Pragmatic Programmer: From Journeyman to Master								
Key Vocabulary	Operating system, Memor	ry management,	Application, Utilities, Open source, Closed SDL		SDLC, Waterfall model,	SDLC, Waterfall model, Agile methodologies,			
	Paging, Segmentation, Vir	on, Virtual memory, source, Source code, Translator, Interpreter, Extreme programming, Spiral model, RA				Spiral model, RAD			
	Interrupt, ISR, Scheduling, RR, FCFS, MLFQ, SJF, Compiler, Assembler, Compilation, Lexical								
	SRT, Distributed OS, Embe	dded OS, Multi-	analysis, Syntax analysis, Code generation,						
	tasking OS, Multi-user OS,	Real-time OS, BIOS,	Optimisation, Linker, Loaders, Libraries						
	Device drivers, Virtual ma	chine, Intermediate							
	code								
Digital Literacy	Use of technology								
	Understanding of how technology works								
Careers	Computer Scientist – Programmer – R&D – Processor coding – Software engineer								