KEVI CAMP HILL SCHOOL FOR GIRLS

COMPUTER SCIENCE
CURRICULUM MAP (YEARS 7-13)

KING EDWARD VI CAMP HILL SCHOOL FOR GIRLS
Educational excellence for our City

	AUTUMN TERM	SPRING TERM	SUMMER TERM
YEAR 7	• Introduction to Camp Hill systems (incl baseline test) • Touch typing / Health & Safety • Spreadsheets & modelling #1	• Binary • Introduction to Scratch	• Control and flowcharts • Text-based adventure game • Databases & data capture
YEAR 8	• Python #1 (i/o, processing and selection) • Spreadsheets #2	• Boolean logic gates • Creating websites (HTML & CSS)	• Group project - app design dragons' den • Physical computing (micro-bits)
YEAR 9	• Python #2 (selection, loops and lists)	• Algorithms #1 - searching • Media storage (graphs, sound, compression) • Algorithms #2 - SatNav case study • Algorithms #3 - Sorting	• Laws relating to computing • Intelligence & AI • History & Future of Computing
YEAR 10	• Computer Architecture • Storage and data	• Boolean logic • Data / Binary • Good design	• Networks #1 • Ethics #1
	• Computational thinking • Python – basics of programming	• Python – string handling, file handling, functions	• Python / programming practice • Low level coding (Little Man Computer)
YEAR 11	• Networks #2 • Cybersecurity • Software & methodologies • HTML / CSS / Javascript • Testing	• Algorithms in common use • Utility software • Law in relation to computers • Ethics #2 • Revision & exam techniques	• Revision & GCSE exams
	• Programming project (non-NEA)	• Python / programming on paper	

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YEAR 12	• Computer hardware #1 • Low level coding (Little Man Computer) • Data structures #1 • Binary • Operating systems • Databases #1 (ERDs) • Networks	• Legislation & ethics • Software methodologies • Testing • Data structures #2	• Revision for school exams (AS level)
	• Programming – structured courses (Python or C#)	• Programming – independent development & exploration	• Mini project (small groups) • NEA (independent programming project)
YEAR 13	• Hardware #2 • Software • Recursion • Databases #2 (3rd normal form) • Data structures #3 • Boolean algebra • SQL • NEA (independent programming project)	• Algorithmic complexity • Pathfinding algorithms • Programming paradigms • Programming – exam revision	• Revision & A level exams