



	Autumn 1			Autumn 2			Spring 1			Spring 2		Summer 1		Summer 2		
Reporting Y10		CfCs			BfL & Grades			CfCs			BfL & Grades			BfL & Report		
Year 10	Programming - introduce online IDE repl.it. Basic principles of programming (2.2) - input\output, variables\constants, sequence, selection and iteration. Data types - integer, string, Boolean, array, casting between types. Introduction to IDE (2.5)	1.1 - System architecture, Von Neumann sys architecture, fetch-execute cycle	1.2.1 - Memory - RAM, ROM, Flash 1.2.2 - secondary storage magnetic, optical and solid state	Assessment on 1.1 and memory\storage aspect of 1.2	1.2 - sizes, binary, hexadecimal. 1.2 image, sound and character data representation	Data rep Assessment (bin, hex, sound, image, character)	Review of topics covered and DIT on assessments	2.1 - algorithms, pseudocode\flowcharts and their relationship to actual code	2.1 - Common algorithms - bubble sort, merge sort, linear search, insertion sort, binary search 2.2 - programming techniques that link to search and sort (arrays - 1D and introduce 2D)	Algorithm Assessment - search and sorting	2.2 and 2.4 - Boolean operators in programming - AND\OR\NOT. Truth tables	Additional programming techniques (2.2) - working with files - open, read, write, close. Use of SQL to interrogate data	Defensive design in programming (2.3) - main ability of code, commenting, documentation, system lifecycle, testing - dry runs and other methods of testing code	2.5 - features of programming languages - low-level high level languages ; features of IDE	1.6 - ethical, legal, cultural and environmental impact of computer science	1.5 - system software including operating systems, common utility software and different operating systems
Reporting Y11		CfCs & Grades			Rep & Grades			CfCs & Grades			BfL & Grades					
Year 11	1.3 - networks: topologies, wired and wireless networks, protocols, network addressing, LAN and WAN, cloud, client-server\peer-to-peer networks.	Topic assessment	1.4 threats to networks - attack methods, network security, the role of the "human" as a weak link. Methods of prevention - software, hardware, policies and methods.	1.4 Assessment	Revision lessons (PPE1 prep)	PPEs	Programming project with Paper 2 revision elements	Paper 2 recap with mixed assessments - short programming tasks and "dry runs".	Revision activities - short assessments, recaps, topic based activities, examination practise (walking talking mocks)	Public Examination						