Year Group: 11	Subject: Computer Science	Term: Spring 2020

Topic	Key Learning points	Assessments

System security	• forms of attack
	• threats posed to networks:
	  >malware
	  >phishing
	  > people as the 'weak point' in secure systems (social engineering)
	  >brute force attacks
	  >denial of service attacks
	  >data interception and theft
	  >the concept of SQL injection
	  >poor network policy
	• identifying and preventing vulnerabilities:
	  >penetration testing
	  >network policies
	  >anti-malware software
	  >firewalls
	  >user access levels
	  >passwords
	  >encryption.
		An end of unit formal assessment carried out under exam conditions.

Systems software	• the purpose and functionality of systems software
	• operating systems:
	  >user interface
	  >memory management/multitasking
	  >peripheral management and drivers
	  >user management
	  >file management
	• utility system software:
	  >encryption software
	  >defragmentation
	  >data compression
	  >the role and methods of backup
		An end of unit formal assessment carried out under exam conditions.