





Digital Technologies Curriculum – Levels 9 and 10

Content descriptions

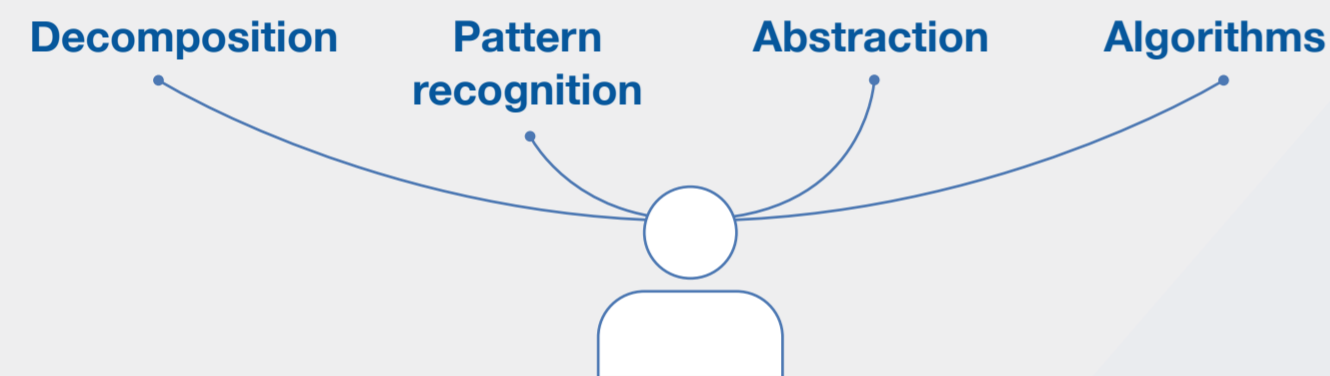
Digital Systems

Investigate the role of hardware and software

Managing operating systems		Router	
Firewall		Encryption	

Ways of thinking at Levels 9 and 10

Computational thinking



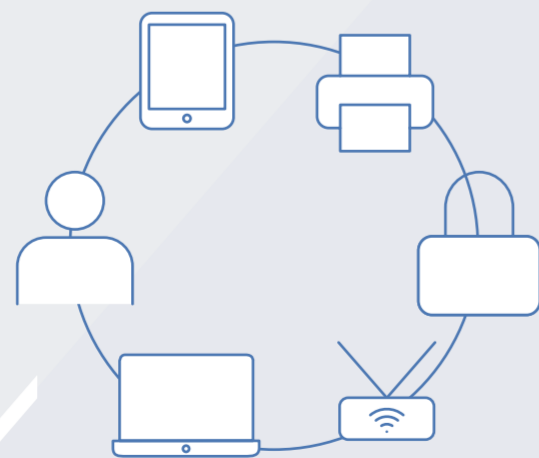
Design thinking

- Generating designs
- Analysing and evaluating designs against criteria














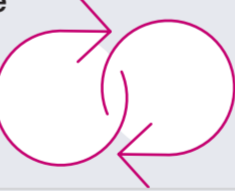




Systems thinking









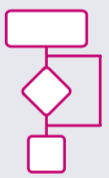


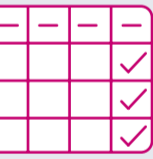
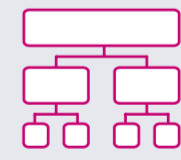

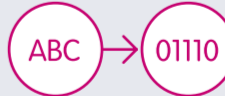




Interactions and interrelationships between components, devices and people



Data and Information

Analyse simple compression of data	JPG		PNG	
	MP4		CSS	
Develop techniques for acquiring, storing and validating data	Search		Survey	
	Storing		Security	
Analyse and visualise data to create information	Analyse		Create information	
	Spreadsheet		Database	
Manage and collaboratively create solutions	Manage project		Collaborate	
	Copyright		Privacy	

Creating Digital Solutions

Define and decompose problems precisely	Decompose problems		Functional requirements	
	Non-functional requirements		Interview	
Design the user experience of a digital system	User experience (UX)		Mock-up	
	Alternative designs		Criteria	
Design algorithms	Flowchart		Structured English	
	Tracing		Testing	
Develop modular programs using an object-oriented programming language	Modular programs		Algorithms	
	Data structures		Object-oriented programming	
Evaluate how student-developed solutions and information systems provide for innovation	Evaluate solution		Policies	
	Future risks		Innovation	