

# Comparison of AC v8.4 to v9.0

## Years 7-8 band: Digital Technologies

Key	same/refined	removed	new	moved
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**Note:**

- the key applies to the content descriptions only
- v8.4 content descriptions may have been reordered to align with v9.0 content descriptions.

Version 8.4			Version 9.0		
Achievement standard			Achievement standard		
<p>By the end of Year 8, students distinguish between different types of networks and defined purposes. They explain how text, image and audio data can be represented, secured and presented in digital systems.</p> <p>Students plan and manage digital projects to create interactive information. They define and decompose problems in terms of functional requirements and constraints. Students design user experiences and algorithms incorporating branching and iterations, and test, modify and implement digital solutions. They evaluate information systems and their solutions in terms of meeting needs, innovation and sustainability. They analyse and evaluate data from a range of sources to model and create solutions. They use appropriate protocols when communicating and collaborating online.</p>			<p>By the end of Year 8 students develop and modify creative digital solutions, decompose real-world problems, and evaluate alternative solutions against user stories and design criteria. Students acquire, interpret and model data with spreadsheets and represent data with integers and binary. They design and trace algorithms and implement them in a general-purpose programming language. Students select appropriate hardware for particular tasks, explain how data is transmitted and secured in networks, and identify cyber security threats. They select and use a range of digital tools efficiently and responsibly to create, locate and share content; and to plan, collaborate on and manage projects. Students manage their digital footprint.</p>		
Strands	Sub-strands	Content descriptions	Content descriptions	Sub-strands	Strands
Knowledge and understanding	Digital systems	investigate how data is transmitted and secured in wired, wireless and mobile networks, and how the specifications affect performance ACTDIK023	explain how hardware specifications affect performance and select appropriate hardware for particular tasks and workloads AC9TDI8K01 investigate how data is transmitted and secured in wired and wireless networks including the internet AC9TDI8K02	Digital systems	Knowledge and understanding
	Representation of data	investigate how digital systems represent text, image and audio data in binary ACTDIK024	investigate how digital systems represent text, image and audio data using <b>integers</b> AC9TDI8K03 explain how and why digital systems represent <b>integers</b> in binary AC9TDI8K04	Data representation	
Processes and production skills	Collecting, managing and analysing data	acquire data from a range of sources and evaluate authenticity, accuracy and timeliness ACTDIP025 analyse and visualise data using a range of software to create information, and use structured data to model objects or events ACTDIP026	acquire, store and <b>validate</b> data from a range of sources using software, <b>including spreadsheets and databases</b> AC9TDI8P01 analyse and visualise data using a range of software, <b>including spreadsheets and databases</b> , to draw conclusions and make predictions by identifying trends AC9TDI8P02 model and query the attributes of objects and events using structured data AC9TDI8P03	Acquiring, managing and analysing data	Processes and production skills
	Investigating and defining	define and decompose real-world problems taking into account functional requirements and economic, environmental, social, technical and usability constraints ACTDIP027	define and decompose real world problems with <b>design criteria</b> and <b>by creating user stories</b> AC9TDI8P04	Investigating and defining	
	Generating and designing	design algorithms represented diagrammatically and in English, and trace algorithms to predict output for a given input and to identify errors ACTDIP029 design the user experience of a digital system, generating, evaluating and communicating alternative designs ACTDIP028	design algorithms involving <b>nested control structures</b> and represent them using <b>flowcharts</b> and <b>pseudocode</b> AC9TDI8P05 trace algorithms to predict output for a given input and to identify errors AC9TDI8P06	Generating and designing	
			design the user experience of a digital system AC9TDI8P07 generate, modify, communicate and evaluate alternative designs AC9TDI8P08		
	Producing and implementing	implement and modify programs with user interfaces involving branching, iteration and functions in a general-purpose programming language ACTDIP030	implement, modify and <b>debug</b> programs involving control structures and functions in a general purpose programming language AC9TDI8P09	Producing and implementing	
	Evaluating	evaluate how student solutions and existing information systems meet needs, are innovative, and take account of future risks and sustainability ACTDIP031	evaluate existing and student solutions against the <b>design criteria</b> , <b>user stories</b> and possible future impact AC9TDI8P10	Evaluating	
	Collaborating and managing	plan and manage projects that create and communicate ideas and information collaboratively online, taking safety and social contexts into account ACTDIP032	select and use a range of digital tools efficiently, including unfamiliar features, to create, locate and communicate content, consistently applying common conventions AC9TDI8P11 select and use a range of digital tools efficiently and responsibly to share content online, and plan and manage individual and collaborative agile projects AC9TDI8P12	Collaborating and managing	
		<b>explain how multi factor authentication protects an account when the password is compromised and identify phishing and other cyber security threats</b> AC9TDI8P13	Privacy and security		

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			investigate and manage the digital footprint existing systems and student solutions collect and assess if the data is essential to their purpose AC9TDI8P14		

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