Years 7–8 band Digital Technologies

ACiQ | v9.0

Australian Curriculum Version 9.0: Achievement standard aligned to content descriptions

This resource shows alignment between aspects of the achievement standard and relevant content descriptions for Years 7–8 band. A similar resource is available for Prep/other bands.

The Australian Curriculum (AC) v9.0 code for each content description includes an element indicating the strand it is organised by, e.g. AC9TDI8K01 indicates Knowledge and understanding strand.

Key to content description codes: Digital Technologies	
e.g. **AC9TDI8K01** Australian Curriculum (**AC**) Version 9 (**9**) Technologies Learning area (**T**) Digital Technologies (**DI**) Years 7–8 band (**8**) Strand (**K**, **P**) Content description number (**##**)	Strands: • K — Knowledge and understanding • P — Processes and production skills

Years 7–8 band Australian Curriculum: Digital Technologies achievement standard

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.

Achievement standard aspect	Relevant content description/s	AC v9.0 code
By the end of Year 8	**Students learn to:**	
Students develop and modify creative digital solutions, decompose real-world problems, and evaluate alternative solutions against user stories and design criteria.	• define and decompose real-world problems with design criteria and by creating user stories	AC9TDI8P04
	• design the user experience of a digital system	AC9TDI8P07
	• generate, modify, communicate and evaluate alternative designs	AC9TDI8P08
	• evaluate existing and student solutions against the design criteria, user stories and possible future impact	AC9TDI8P10
They acquire, interpret and model data with spreadsheets and represent data with integers and binary.	• investigate how digital systems represent text, image and audio data using integers	AC9TDI8K03
	• explain how and why digital systems represent integers in binary	AC9TDI8K04
	• acquire, store and validate data from a range of sources using software, including spreadsheets and databases	AC9TDI8P01
	• analyse and visualise data using a range of software, including spreadsheets and databases, to draw conclusions and make predictions by identifying trends	AC9TDI8P02
	• model and query the attributes of objects and events using structured data	AC9TDI8P03
They design and trace algorithms and implement them in a general-purpose programming language.	• design algorithms involving nested control structures and represent them using flowcharts and pseudocode	AC9TDI8P05
	• trace algorithms to predict output for a given input and to identify errors	AC9TDI8P06
	• implement, modify and debug programs involving control structures and functions in a general-purpose programming language	AC9TDI8P09
They select appropriate hardware for particular tasks, explain how data is transmitted and secured in networks, and identify cyber security threats.	• 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
	• explain how multi-factor authentication protects an account when the password is compromised and identify phishing and other cyber security threats	AC9TDI8P13
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.	• 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
They manage their digital footprint.	• investigate and manage the digital footprint existing systems and student solutions collect and assess if the data is essential to their purpose.	AC9TDI8P14

More information

If you would like more information, please visit the QCAA website www.qcaa.qld.edu.au. Alternatively, email the K–10 Curriculum and Assessment branch at australiancurriculum@qcaa.qld.edu.au.