Years 9–10 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 9–10 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. AC9TDI10K01 indicates Knowledge and understanding strand.

Key to content description codes: Digital Technologies	
e.g. **AC9TDI10K01** Australian Curriculum (**AC**) Version 9 (**9**) Technologies Learning area (**T**) Digital Technologies (**DI**) Years 9–10 band (**10**) Strand (**K**, **P**) Content description number (**##**)	Strands: • K — Knowledge and understanding • P — Processes and production skills

Years 9–10 band Australian Curriculum: Digital Technologies achievement standard

By the end of Year 10 students develop and modify innovative digital solutions, decompose real-world problems, and critically evaluate alternative solutions against stakeholder elicited user stories. Students acquire, interpret and model complex data with databases and represent documents as content, structure and presentation. They design and validate algorithms and implement them, including in an object-oriented programming language. Students explain how digital systems manage, control and secure access to data; and model cyber security threats and explore a vulnerability. They use advanced features of digital tools to create interactive content, and to plan, collaborate on, and manage agile projects. Students apply privacy principles to manage digital footprints.

Achievement standard aspect	Relevant content description/s	AC v9.0 code
By the end of Year 10	**Students learn to:**	
Students develop and modify innovative digital solutions, decompose real-world problems, and critically evaluate alternative solutions against stakeholder elicited user stories.	• define and decompose real-world problems with design criteria and by interviewing stakeholders to create user stories	AC9TDI10P04
	• design and prototype the user experience of a digital system	AC9TDI10P07
	• generate, modify, communicate and critically evaluate alternative designs	AC9TDI10P08
	• evaluate existing and student solutions against the design criteria, user stories, possible future impact and opportunities for enterprise	AC9TDI10P10
They acquire, interpret and model complex data with databases and represent documents as content, structure and presentation.	• represent documents online as content (text), structure (markup) and presentation (styling) and explain why such representations are important	AC9TDI10K02
	• investigate simple data compression techniques	AC9TDI10K03
	• develop techniques to acquire, store and validate data from a range of sources using software, including spreadsheets and databases	AC9TDI10P01
	• analyse and visualise data interactively using a range of software, including spreadsheets and databases, to draw conclusions and make predictions by identifying trends and outliers	AC9TDI10P02
	• model and query entities and their relationships using structured data	AC9TDI10P03
They design and validate algorithms and implement them, including in an object-oriented programming language.	• design algorithms involving logical operators and represent them as flowcharts and pseudocode	AC9TDI10P05
	• validate algorithms and programs by comparing their output against a range of test cases	AC9TDI10P06
	• implement, modify and debug modular programs, applying selected algorithms and data structures, including in an object-oriented programming language	AC9TDI10P09
They explain how digital systems manage, control and secure access to data; and model cyber security threats and explore a vulnerability.	• investigate how hardware and software manage, control and secure access to data in networked digital systems	AC9TDI10K01
	• develop cyber security threat models, and explore a software, user or software supply chain vulnerability	AC9TDI10P13
They use advanced features of digital tools to create interactive content, and to plan, collaborate on, and manage agile projects.	• select and use emerging digital tools and advanced features to create and communicate interactive content for a diverse audience	AC9TDI10P11
	• use simple project management tools to plan and manage individual and collaborative agile projects, accounting for risks and responsibilities	AC9TDI10P12
They apply privacy principles to manage digital footprints.	• apply the Australian Privacy Principles to critique and manage the digital footprint that existing systems and student solutions collect.	AC9TDI10P14

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.