



Curriculum comparison

Levels 7 and 8

Victorian Curriculum	Australian Curriculum
Levels 7 and 8	Years 7 and 8
explain how hardware specifications affect performance and select appropriate hardware for particular tasks and workloads VC2TDI8S01	AC9TDI8K01 explain how hardware specifications affect performance and select appropriate hardware for particular tasks and workloads
investigate how data is transmitted and secured in wired and wireless networks including the internet VC2TDI8S02	AC9TDI8K02 investigate how data is transmitted and secured in wired and wireless networks including the internet
explain how multi-factor authentication protects an account when the password is compromised and identify phishing and other cyber security threats VC2TDI8S03	AC9TDI8K03 investigate how digital systems represent text, image and audio data using integers
investigate how digital systems represent text, image and audio data using integers and binary VC2TDI8D01	AC9TDI8K04 explain how and why digital systems represent integers in binary
acquire, store, manipulate and validate data from a range of sources using software tools, including spreadsheets and single-table databases VC2TDI8D02	AC9TDI8P01 acquire, store and validate data from a range of sources using software, including spreadsheets and databases
analyse and visualise data using a range of software, including spreadsheets and simple database queries, draw conclusions and make predictions by identifying trends VC2TDI8D03	AC9TDI8P02 analyse and visualise data using a range of software, including spreadsheets and databases, to draw conclusions and make predictions by identifying trends
select and use a range of digital tools effectively, including unfamiliar features, to create, locate and communicate content, consistently applying common conventions for a diverse audience VC2TDI8D04	AC9TDI8P03 model and query the attributes of objects and events using structured data
select and use a range of digital tools effectively and responsibly to share content online, and plan and manage individual and collaborative iterative projects VC2TDI8D05	AC9TDI8P04 define and decompose real world problems with design criteria and by creating user stories
investigate and manage the digital footprint that existing systems and student solutions collect, and assess if the data is essential to their purpose VC2TDI8D06	AC9TDI8P05 design algorithms involving nested control structures and represent them using flowcharts and pseudocode



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Years 7 and 8

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define and decompose real-world problems by taking into account functional requirements and constraints VC2TDI8C01	AC9TDI8P06 trace algorithms to predict output for a given input and to identify errors
design algorithms involving nested control structures and represent them using flowcharts and pseudocode, and use tracing techniques to test and identify errors VC2TDI8C02	AC9TDI8P07 design the user experience of a digital system
design and modify the user interface and user experience of a digital system; generate, communicate and evaluate the alternative designs VC2TDI8C03	AC9TDI8P08 generate, modify, communicate and evaluate alternative designs
implement, modify and debug programs involving control structures and functions in a general-purpose programming language VC2TDI8C04	AC9TDI8P09 implement, modify and debug programs involving control structures and functions in a general purpose programming language
evaluate existing and student-created solutions against the requirements, constraints and possible future impacts VC2TDI8C05	AC9TDI8P10 evaluate existing and student solutions against the design criteria, user stories and possible future impact
	AC9TDI8P11 select and use a range of digital tools efficiently, including unfamiliar features, to create, locate and communicate content, consistently applying common conventions
	AC9TDI8P12 select and use a range of digital tools efficiently and responsibly to share content online, and plan and manage individual and collaborative agile projects
	AC9TDI8P13 explain how multi factor authentication protects an account when the password is compromised and identify phishing and other cyber security threats
	AC9TDI8P14 investigate and manage the digital footprint existing systems and student solutions collect and assess if the data is essential to their purpose



Curriculum comparison

Years 7 and 8

Achievement Standards

By the end of Level 8, students select appropriate hardware for particular tasks. They explain how data is transmitted and secured in networks. Students identify and describe cyber security threats.

Students represent data using integers and binary. They acquire, manipulate and validate data using spreadsheets and single-table databases. Students interpret, model and visualise data using spreadsheets and database queries to draw conclusions. They select and use a range of digital tools to create, locate and communicate content, applying common conventions. Students use a range of digital tools to plan tasks, share content online, and manage individual and collaborative iterative projects. They manage their digital footprint and privacy when collecting data.

Students define and decompose real-world problems, and determine functional requirements and constraints. They design and trace algorithms using flowcharts and pseudocode. Students design and modify user interfaces and user experiences, and evaluate alternative designs. They implement algorithms and debug programs using a general-purpose programming language. Students evaluate digital solutions against the functional requirements.

Achievement Standards

Learning Area Achievement Standard

By the end of Year 8 students explain how people design, innovate and produce products, services and environments for preferred futures. For each of the 4 prescribed technologies contexts students explain how the features of technologies impact on design decisions, and create designed solutions based on analysis of needs or opportunities. They acquire, interpret and model with spreadsheets and represent data with integers and binary. Students design and trace algorithms; and implement them in a general-purpose programming language. Students create and adapt design ideas, processes and solutions, and justify their decisions against developed design criteria that include sustainability. They communicate design ideas and solutions to audiences using technical terms and graphical representation techniques, including using digital tools. They select appropriate hardware for particular tasks, explain how data is transmitted and secured in networks, and identify cyber security threats. They use a range of digital tools to individually and collaboratively document and manage production processes to safely and responsibly produce designed or digital solutions for the intended purpose. Students manage their digital footprint.

Subject 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.



Curriculum comparison

Levels 9 and 10

Victorian Curriculum	Australian Curriculum
Levels 9 and 10	Years 9 and 10
investigate how hardware and software manage, control and secure access to data in networked digital systems VC2TDI10S01	AC9TDI10K01 investigate how hardware and software manage, control and secure access to data in networked digital systems
develop cyber security threat models, and explore a software, user or software supply chain vulnerability VC2TDI10S02	AC9TDI10K02 represent documents online as content (text), structure (markup) and presentation (styling) and explain why such representations are important
investigate simple data compression techniques VC2TDI10D01	AC9TDI10K03 investigate simple data compression techniques
represent documents online as content (text), structure (markup) and presentation (styling) and explain why such representations are important VC2TDI10D02	AC9TDI10P01 develop techniques to acquire, store and validate data from a range of sources using software, including spreadsheets and databases
develop techniques to acquire, store, manipulate and validate data from a range of sources using software tools, including spreadsheets and relational databases VC2TDI10D03	AC9TDI10P02 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
analyse and visualise data interactively using a range of software, including spreadsheets and relational databases and queries, to draw conclusions and make predictions by identifying trends and outliers VC2TDI10D04	AC9TDI10P03 model and query entities and their relationships using structured data
select and use emerging digital tools and advanced features to create and communicate interactive content for a diverse audience VC2TDI10D05	AC9TDI10P04 define and decompose real world problems with design criteria and by interviewing stakeholders to create user stories
use simple project management tools to plan and manage individual and collaborative iterative projects, accounting for risks and responsibilities VC2TDI10D06	AC9TDI10P05 design algorithms involving logical operators and represent them as flowcharts and pseudocode
apply the Australian Privacy Principles to critique and manage the digital footprint that existing systems and student solutions collect VC2TDI10D07	AC9TDI10P06 validate algorithms and programs by comparing their output against a range of test cases
define and decompose real-world problems, taking into account functional and non-functional requirements and by interviewing and surveying stakeholders to identify needs VC2TDI10C01	AC9TDI10P07 design and prototype the user experience of a digital system
design algorithms involving logical operators and represent them as flowcharts and pseudocode, and validate algorithms and programs by comparing their output against a range of test cases VC2TDI10C02	AC9TDI10P08 generate, modify, communicate and critically evaluate alternative designs



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design, modify and prototype the user interface and user experience of a digital system; generate, communicate and critically evaluate alternative designs against design criteria VC2TDI10C03	AC9TDI10P09 implement, modify and debug modular programs, applying selected algorithms and data structures, including in an object oriented programming language
implement, modify and debug modular programs, applying selected algorithms and data structures, including in an object-oriented programming language VC2TDI10C04	AC9TDI10P10 evaluate existing and student solutions against the design criteria, user stories, possible future impact and opportunities for enterprise
evaluate existing and student-created solutions against the requirements and design criteria, user needs, possible future impact and opportunities for enterprise and innovation VC2TDI10C05	AC9TDI10P11 select and use emerging digital tools and advanced features to create and communicate interactive content for a diverse audience
	AC9TDI10P12 use simple project management tools to plan and manage individual and collaborative agile projects, accounting for risks and responsibilities
	AC9TDI10P13 develop cyber security threat models, and explore a software, user or software supply chain vulnerability
	AC9TDI10P14 apply the Australian Privacy Principles to critique and manage the digital footprint that existing systems and student solutions collect



Curriculum comparison

Levels 9 and 10

Achievement Standards

By the end of Level 10, students explain how digital systems manage, control and secure access to data in networks. They model and evaluate cyber security threats and vulnerabilities.

Students describe a range of data compression techniques. They represent documents as content, structure and markup. Students acquire, manipulate and validate data using spreadsheets and relational databases. They interpret, model and visualise data using spreadsheets, and relational databases using queries, to draw conclusions and identify trends. Students use advanced features of digital tools to create and communicate interactive content for an audience. They use project management tools to plan and manage individual and collaborative iterative projects. Students identify and apply privacy principles to manage digital footprints.

Students decompose real-world problems, identify needs, and determine functional and non-functional requirements. They design, validate and test algorithms using flowcharts and pseudocode. Students design and prototype user interfaces and user experiences, and evaluate alternative designs against design criteria. They implement algorithms and debug programs using an object-oriented programming language. Students critically evaluate digital solutions against user needs and the functional and non-functional requirements.

Achievement Standards

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.