Content Descriptions and Outcomes

Australian Curriculum 5-6	Victorian Curriculum 5-6
Knowledge and Understanding **Digital Systems**	**Digital Systems**
Examine the main components of common digital systems and how they may connect together to form networks to transmit data (ACTDIK014)	Examine the main components of common digital systems, and how such digital systems may connect together to form networks to transmit data (VCDTDS026)
Representation of Data	**Data and Information**
Examine how whole numbers are used to represent all data in digital systems (ACTDIK015)	Examine how whole numbers are used as the basis for representing all types of data in digital systems (VCDTDI027)
Process and production skills **Collecting, managing and analysing data**	**Data and Information**
Acquire, store and validate different types of data, and use a range of software to interpret and visualise data to create information (ACTDIP016)	Acquire, store and validate different types of data and use a range of software to interpret and visualise data to create information (VCDTDI028)
Creating Digital Solutions by… **Investigating and Defining**	**Creating Digital Solutions**
Define problems in terms of data and functional requirements drawing on previously solved problems (ACTDIP017)	Define problems in terms of data and functional requirements, drawing on previously solved problems to identify similarities (VCDTCD030)
Generating and Designing	**Creating Digital Solutions**
Design a user interface for a digital system (ACTDIP018) Design, modify and follow simple algorithms involving sequences of steps, branching, and iteration (repetition) ACTDIP019	Design a user interface for a digital system, generating and considering alternative design ideas (VCDTCD031) Design, modify and follow simple algorithms represented diagrammatically and in English, involving sequences of steps, branching, and iteration (VCDTCD032)
Producing and Implementing	**Creating Digital Solutions**
Implement digital solutions as simple visual programs involving branching, iteration (repetition), and user input (ACTDIP020)	Develop digital solutions as simple visual programs (VCDTCD033)
Evaluating	**Creating Digital Solutions**
Explain how student solutions and existing information systems are sustainable and meet current and future local community needs (ACTDIP021)	Explain how student-developed solutions and existing information systems meet current and future community and sustainability needs (VCDTC034)
Collaborating and managing	**Data and Information**
Plan, create and communicate ideas and information, including collaboratively online, applying agreed ethical, social (ACTDIP022)	Plan, create and communicate ideas, information and online collaborative projects, applying agreed ethical, social and technical protocols (VCDTDI029)

Achievement Standards

Australian Curriculum 5-6	Victorian Curriculum 5-6
By the end of Year 6, students explain the fundamentals of digital system components (hardware, software and networks) and how digital systems are connected to form networks. They explain how digital systems use whole numbers as a basis for representing a variety of data types. Students define problems in terms of data and functional requirements and design solutions by developing algorithms to address the problems. They incorporate decision-making, repetition and user interface design into their designs and implement their digital solutions, including a visual program. They explain how information systems and their solutions meet needs and consider sustainability. Students manage the creation and communication of ideas and information in collaborative digital projects using validated data and agreed protocols.	By the end of Level 6, students explain the functions of digital system components and how digital systems are connected to form networks that transmit data. Students explain how digital systems use whole numbers as a basis for representing a variety of data types. They manage the creation and communication of ideas, information and digital projects collaboratively using validated data and agreed protocols. Students define problems in terms of data and functional requirements and design solutions by developing algorithms to address the problems. They incorporate decision-making, repetition and user interface design into their designs and develop their digital solutions, including a visual program. Students explain how information systems and their developed solutions meet current and future needs taking sustainability into account.