Content Descriptions

Australian Curriculum Levels 5-6	Western Australian Year 5 Syllabus
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)	Digital systems have components with basic functions that may connect together to form networks which transmit data (ACTDIK014)
Representation of data	**Representation of data**
Examine how whole numbers are used to represent all data in digital systems (ACTDIK015)	Data is represented using codes (ACTDIK015)
Collecting, managing and analysing data	**Collecting, managing and analysing data**
Acquire, store and validate different types of data, and use a range of software to interpret and visualise data to create information (ACTDIP016)	Collect, store and present different types of data for a specific purpose using software (ACTDIP016)
Investigating and defining	**Investigating and defining**
Define problems in terms of data and functional requirements drawing on previously solved problems (ACTDIP017)	Define a problem, and set of sequenced steps, with users making a decision to create a solution for a given task (WATPPS27) Identify available resources (WATPPS28)
Generating and designing	**Designing**
Design a user interface for a digital system (ACTDIP018) Design, modify and follow simple algorithms involving sequences of steps, branching, and iteration (repetition) ACTDIP019	Develop and communicate alternative solutions, and follow design ideas, using annotated diagrams, storyboards and appropriate technical terms (WATPPS29)
	Digital implementation
	Design solutions to a user interface for a digital system (ACTDIP018) Design, follow and represent diagrammatically, a simple sequence of steps (algorithm), involving branching (decisions) and iteration (repetition) (ACTDIP019)
Producing and implementing	**Producing and implementing**
Implement digital solutions as simple visual programs involving branching, iteration (repetition), and user input (ACTDIP020)	Select, and apply, safe procedures when using components and equipment to make solutions (WATPPS30)
	Digital implementation
	Implement and use simple programming environments that include branching (decisions) and iteration (repetition) (ACTDIP020)
Evaluating	**Evaluating**
Explain how student solutions and existing information systems are sustainable and meet current and future local community needs (ACTDIP021)	Develop negotiated criteria to evaluate and justify design processes and solutions (WATPPS31)
Collaborating and managing	**Collaborating and managing**
Plan, create and communicate ideas and information, including collaboratively online, applying agreed ethical, social (ACTDIP022)	Work independently, or collaboratively when required, to plan, develop and communicate ideas and information for solutions (WATPPS32)
	Digital implementation
	Create and communicate information, including online collaborative projects, using agreed social, ethical and technical protocols (codes of conduct) (ACTDIP022)

Achievement Standards

Australian Curriculum Levels 5-6	Western Australian Year 5 Syllabus
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.	At Standard, students identify components of digital systems and their basic functions that connect to form networks which transmit data. They represent data using code, as well as using software to collect, store and present data for a specific purpose. Students create design solutions for a user interface and design, follow and represent diagrammatically, a simple sequence of steps (algorithms), involving branching (decisions) and iteration (repetition), implementing and using simple programming. They create and communicate information for online collaborative projects, using agreed social, ethical and technical protocols (codes of conduct). In Digital Technologies, students define problem, identify available resources and create algorithms (sequenced steps) to assist in decision making for a given digital task. They develop and communicate alternative solutions, and use annotated diagrams, storyboards and appropriate technical terms when following design ideas. Students select and apply safe procedures when using components and equipment. They develop negotiated criteria to evaluate and justify design processes and solutions. Students work independently, or collaboratively, to plan, safely develop and communicate ideas and information.