## **Year 4 Digital Technologies (Semester 1 only)**

#### **Achievement Standard**

By the end of Year 4 students create simple digital solutions and use provided design criteria to check if solutions meet user needs. Students process and represent data for different purposes. They follow and describe simple algorithms involving branching and iteration and implement them as visual programs. Students securely access and use digital systems and their peripherals for a range of purposes, including transmitting data. They use the core features of common digital tools to plan, create, locate and share content, and to collaborate, following agreed behaviours. Students identify their personal data stored online and recognise the risks.

#### **Assessment Elements**

An overall level of achievement in this subject is determined by the teacher's on-balance judgment of the evidence presented in students' summative assessment across the following:

- Knowledge and Understanding digital systems and representation of data
- Processes and Production Skills collecting, managing and creating data, defining, implementing, evaluating, collaborating and managing

### **Delivery (mode, requirements, lessons)**

Students will be offered a blended model of delivery with live lessons and independent study on their program to complete lessons, tasks and assessment in accordance with the Work Rate Calendar.

#### **Student Requirements**

Computer, internet access, email, printer, scanner, headset with microphone, stationery, resource list and SRS list.

# **Year 4 Digital Technologies (Semester 1 only)**

Units, Learning Experiences and Summative Assessment		
Semester 1	Term 1	Unit 1 Be an Esafe Kid Empower students to protect their online privacy and personal information that identifies them. Students will learn about the skills required to create safer online environments.
		Unit 2: Digital Systems and Data Students will delve into the fascinating world of Digital Systems, Peripherals, and Data. They will learn how computers work, the various devices that can be connected to them, and how data is processed and represented. Students will also focus on securely accessing and using digital systems and peripherals to transmit data.
		Summative Assessment: Esafe Campaign Purpose of Assessment Task: To identify how to keep their personal information and data secure and use the core common features of digital tools following agreed behaviours. Develop and Esafe Campaign
		Summative Assessment: Digital Systems Students will complete the assessment task attached and submit through Qlearn by the due date. Students will be required to: Identify Peripheral devices. Identify the functions and purpose of at least 3 peripheral devices. Select at least one data set provided and display the data appropriately in a graph using excel.
	Term 2	Unit 2: Algorithms  Students learn how three different types of algorithms function in computers, that looping makes algorithms more efficient, and understand that conditions and branching present alternate paths. Students are introduced to pixels and how they form digital images on a computer. Practical activities include following a pseudocode to create origami fish, writing algorithms to create a digital pixel image and create a branching flowchart and digital die. Digital Technologies Processes and Production Skills, such as describing, implementing, defining and planning are developed throughout
		Summative assessment: Use simple design criteria to plan a simple algorithm including branching and implement Scratch.

**Disclaimer** All of the above information is accurate at the time of development.