# Digital Technologies

<table>
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<th>Year level</th>
<th>Project Intentions-[ What do you want the students to Know, understand &amp; do]</th>
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<td>Length</td>
<td>Sustainability</td>
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## Learning Intentions

### Digital systems

**Skills & Techniques involved & being targeted**

- Students will have had opportunities to create a range of digital solutions.
- Students analyse the properties of networked systems and their suitability and use for the transmission of data types.
- They acquire, analyse, validate and evaluate various types of data, and appreciate the complexities of storing and transmitting.
- Students use structured data to model objects and events that shape the communities they actively engage with.
- They develop their understanding of the vital role that data plays in their lives, and how the data and related systems define and are limited by technical, environmental, economic and social constraints.
- They develop abstractions by identifying common elements while decomposing apparently different problems and systems.
- When defining problems, students identify the key elements of the problems and the factors and constraints at play.
- They design increasingly complex algorithms that allow data to be manipulated automatically, and explore different ways of showing the relationship.
- They progress from designing the user interface to considering user experience factors.
- They broaden their programming experiences to include general-purpose programming languages, and incorporate sub-programs into their solutions.
- They predict and evaluate their developed and existing solutions, considering time, tasks, data and the safe and sustainable use of information systems, and anticipate any risks.
- Students plan and manage individual and team projects with some autonomy.
- They consider ways of managing the exchange of ideas, tasks and files, and techniques for monitoring progress and feedback.
- When communicating and collaborating online, students develop an understanding of different social contexts, for example acknowledging cultural practices and meeting legal obligations.

### Representation of data

### Processes & production skills

#### Defining

**Design Concepts**

#### Designing

**Project management aspects focussed**

#### Implementing

**Materials focus**

#### Evaluating

**Context Tools**

#### Collaborating & managing

**Tools**