


Year Level Plan	Year 10	Digital Technologies	
Digital Technologies		Introduction to Digital Solutions	
Semester One			
<p>Overview</p> <p>In this unit students will use the problem solving process of Explore, Develop, Generate, Evaluation and Refine in solving real world problems over a variety of coding contexts. Students will apply a range of skills and processes when creating digital solutions. They will:</p> <ul style="list-style-type: none"> • Explore social and ethical issues associated with technology as we know it today • Plan and manage a range of digital projects • Design and evaluate user experiences when planning digital projects • Use object-oriented programming language/s • Design and evaluate algorithms in solving digital problems • Test and predict results of digital projects • Evaluate how student solutions and existing information systems meet needs and take account of risk, sustainability, and potential for innovation and enterprise. • Share and collaborate information online, establishing protocols for the use, transmission and maintenance of data and projects. 			
Assessment Tasks			
<p>Assessment Task 1: Problem Solving Process</p> <p>Students are to demonstrate processing and production skills in planning, designing and building a responsive website to solve a problem.</p> <p>Digital Technologies - Processing and Production Skills</p> <ul style="list-style-type: none"> • Define and decompose real-world problems precisely, taking into account functional and non-functional requirements and including interviewing stakeholders to identify needs • Design the user experience of a digital system by evaluating alternative designs against criteria including functionality, accessibility, usability, and aesthetics • Evaluate critically how student solutions and existing information systems and policies, take account of future risks and sustainability and provide opportunities for innovation and enterprise • Plan and manage projects using an iterative and collaborative approach, identifying risks and considering safety and sustainability 		<p>Assessment Task 2: Programming Language</p> <p>Students are to demonstrate processing and production skills in designing algorithms and coding procedural text-based language problems.</p> <p>Digital Technologies - Processing and Production Skills</p> <ul style="list-style-type: none"> • Define and decompose real-world problems precisely, taking into account functional and non-functional requirements and including interviewing stakeholders to identify needs • Design algorithms represented diagrammatically and in structured English and validate algorithms and programs through tracing and test cases • Implement modular programs, applying selected algorithms and data structures including using an object-oriented programming language 	