



# Australian Curriculum: Digital Technologies – Years 7-8

## Band plan-2023

CURRICULUM		YEAR 7		YEAR 8	
		Semesters 1&2		Semester 1	Semester 2
		Unit repeated - Terms 1,2,3,4		Terms 1&3	Terms 2&4
<b>Unit name</b>		Minecraft – Python 101		Networking and Data Fundamentals	3D Game Development and Design
<b>Unit description</b>		<p>Students learn the fundamental elements of programming with python. They will apply a range of skills and process in the production digital solutions, with consideration to meeting their clients’ needs they will design, define, and decompose functional, technical, social and usability constraints; investigate user experience and needs and apply those principles to the user experience design. They will use algorithms including branching and iterations to design their solutions; test algorithms for accuracy; evaluate how well needs are met through their digital solution and evaluate them against criteria.</p>		<p>Students will follow the software development and inquiry cycle to develop an online quiz. They will apply computational thinking to help people learn about network systems, as well as how data is stored and transmitted. They will use iterative thinking to modify characteristics of their quiz to make it unique and appealing for the end user, and to distinguish from others in the class. They will evaluate the final product the development process, and if it meets the requirements, as well as considering the constraints that were involved in the development process.</p>	<p>In this unit, students will use the Unity Editor to set up a simple 3D game environment, create custom scripts using C# to create game functionality, a basic user interface, and a set an input using a new input system. They will apply computational thinking to help people learn about functionality in a 3D game environment and how Unity uses different data. They will use iterative thinking to modify characteristics of their unity project to make it unique and appealing for the end user, and to distinguish from others in the class. They will implement and modify C# algorithms to develop their game. They will evaluate the final product the development process, and if it meets the requirements, as well as considering the constraints that were involved in the development process.</p>
ASSESSMENT		Year 7		Year 8	
		Semesters 1&2		Term 1	Term 2
		Coding MineCraft		Network and Data – How much do you know? (Online Quiz)	Roll-a-Ball Unity Game
<b>Range and balance of summative assessment conventions</b>	<b>Technique</b>	Project		Project	Project
	<b>Type of Text</b>	Digital Multimodal		Digital Multimodal & ICT Digital Solution	Digital Multimodal & ICT Digital Solution
	<b>Mode</b>	Written folio		Written & Practical	Written & Practical
	<b>Conditions</b>	<ul style="list-style-type: none"> <li>Written responses, including graphical representations 200–300 words</li> <li>In class</li> <li>Some teacher and peer assistance</li> <li>7 Weeks</li> </ul>		<ul style="list-style-type: none"> <li>Written responses, including graphical representations 200–300 words</li> <li>Digital solution (Scratch Quiz)</li> <li>In class</li> <li>Some teacher and peer assistance</li> </ul>	<ul style="list-style-type: none"> <li>Written responses, including graphical representations 200–300 words</li> <li>Digital solution (Unity)</li> <li>In class and at home</li> <li>Some teacher and peer assistance</li> </ul>

		• 8 Weeks	• 9 Weeks (Approx. 18 lessons)
<b>Aspects of the achievement standard</b>			
distinguish between different types of networks and defined purposes		✓	
explain how text, image and audio data can be represented, secured and presented in digital systems		✓	
plan and manage digital projects to create interactive information	✓	✓	✓
define and decompose problems in terms of functional requirements and constraints	✓	✓	✓
design user experiences and algorithms incorporating branching and iterations	✓	✓	✓
independently and safely plan, design, test, modify and create a range of digital solutions that meet intended purposes including user interfaces and the use of a programming language	✓	<div style="text-align: center;">             To be added to MG         </div>	
evaluate information systems and their solutions in terms of meeting needs, innovation and sustainability	✓	✓	✓
analyse and evaluate data from a range of sources to model and create solutions			✓
use appropriate protocols when communicating and collaborating online			

Term 1
Term 2
Term 3
Term 4

 indicates opportunities that summative assessments provide for students to demonstrate evidence against aspects of the achievement standard