## Levels 5 & 6 Overview of units

\*\* marks spotlighted unit for the school

and considering alternative design ideas

branching, and iteration

sustainability needs

**VCDTCD032:** Design, modify and follow simple algorithms represented

diagrammatically and in English, involving sequences of steps,

VCDTCD033: Develop digital solutions as simple visual programs
VCDTCD034: Explain how student-developed solutions and existing information systems meet current and future community and

We note that some curriculum content descriptors are not addressed in this overview at the time of publishing. School snapshots for the case studies project are classified on a spectrum from "starting out" to "consolidating practices".



	Unit A	Unit B	Unit C	Unit D
Title / theme	Design & Create a Game Controller**	Be Safe Online!	Code Your Agent	Scratch Game
Summary / intention	Students research, design and create a game controller to meet the needs of someone with colour blindness.	Students design and create an e- safety themed interactive maze on Minecraft	Students complete a series of coding challenges on Minecraft EE before creating their own coding challenges for others to complete.	Students design their own Scratch game based on a theme and self-assess their game based on the needs and wants of the user.
Approximate number of hours	8	10	10	10
Assessment piece or pieces	Game Controller Design and Justification	Game plan Project – e-safety game	Project – Object built using block coding. Finished Code	Project – Scratch Game Assessment Rubric
Hardware and software tools used	Laptop Makey Makey	Laptop Minecraft EE	Laptop Minecraft EE	Laptop Scratch
Curriculum Content Descriptions addressed:	DIGITAL SYSTEMS	DIGITAL SYSTEMS	DIGITAL SYSTEMS	DIGITAL SYSTEMS
DIGITAL SYSTEMS	☑ VCDTDS026	□ VCDTDS026	□ VCDTDS026	□ VCDTDS026
VCDTDS026: Examine the main components of common digital systems, and how such digital systems may connect together to form networks to transmit data	DATA AND INFORMATION  UCDTDS027	DATA AND INFORMATION  UCDTDS027	DATA AND INFORMATION  UVCDTDS027	DATA AND INFORMATION  UCDTDS027
DATA AND INFORMATION	□ VCDTDS028	□ VCDTDS028	□ VCDTDS028	□ VCDTDS028
VCDTDI027: Examine how whole numbers are used as the basis for representing all types of data in digital systems	⊠ VCDTDS029	⊠ VCDTDS029	□ VCDTDS029	⊠ VCDTDS029
<b>VCDTDI028:</b> Acquire, store and validate different types of data and use a range of software to interpret and visualise data to create information	CREATING DIGITAL SOLUTIONS  ☐ VCDTDS030	CREATING DIGITAL SOLUTIONS  □ VCDTDS030	CREATING DIGITAL SOLUTIONS  ☑ VCDTDS030	CREATING DIGITAL SOLUTIONS  □ VCDTDS030
<b>VCDTDI029:</b> Plan, create and communicate ideas, information and online collaborative projects, applying agreed ethical, social and technical protocols	⊠ VCDTDS031	✓ VCDTDS031	□ VCDTDS031	✓ VCDTDS031
	□ VCDTDS032	∨CDTDS032	∨CDTDS032	⊠ VCDTDS032
CREATING DIGITAL SOLUTIONS	□ VCDTDS033	∨CDTDS033	∨CDTDS033	☑ VCDTDS033
VCDTCD030: Define problems in terms of data and functional requirements, drawing on previously solved problems to identify similarities	⊠ VCDTDS034	□ VCDTDS034	□ VCDTDS034	□ VCDTDS034
VCDTCD031: Design a user interface for a digital system, generating				

Copyright: All Victorian Curriculum and Assessment Authority (VCAA) material is copyright. The VCAA makes no warranties regarding the correctness or accuracy of this DLTV resource. The current Victorian Curriculum and related content can be accessed directly at <a href="https://www.vcaa.vic.edu.au">www.vcaa.vic.edu.au</a>.