

## Varsity College Year 10 Digital Solutions 2025

## Term 1

Date	Topics	Assessment
27-31 January	O-Week	
Australia Day: Monday	Investigate robotics	
	Overview of VEX IQ parts and components	
	Build a basic robot using VEX IQ parts	
	Build a robotic arm and test movement	
3-7 February	Robot control through coding and sensor inputs	
	Logical sequencing to guide robot movement	
	Loops in programming to repeat actions	
10-14 February	Navigate robot through a maze using VEXcode VR	
Swimming Carnival: Tuesday		
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17-21 February	Distance sensors in VEXcode VR to detect obstacles	
	and walls	
	Conditional logic to program the virtual robot to	
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24-28 February	Virtual robot's location data to navigate	
	programming	
	Problem-solving skills by programming the robot to	
	move to specific locations based on coordinates	
3-7 March	Conditional logic blocks to program a robot	
GC25: Wednesday		
	program	
10-14 March		
	movements and tasks	
	Algorithms that efficiently use loops	
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17-21 March	Assessment	Project and Folio
		Lesson 3
24-28 March	Assessment	
31 March - 4 April	Assessment Review	
	27-31 January O-Week Australia Day: Monday  3-7 February  10-14 February Swimming Carnival: Tuesday  17-21 February  24-28 February  10-14 March  17-21 March  24-28 March	O-Week     Investigate robotics     Overview of VEX IQ parts and components     Build a basic robot using VEX IQ parts     Build a robotic arm and test movement     Robot control through coding and sensor inputs     Logical sequencing to guide robot movement     Loops in programming to repeat actions     Navigate robot through a maze using VEXcode VR     Sensor inputs in robot programming     Structured pathfinding problems     Trespond to sensor data     Problem-solving skills by creating efficient code to navigate environments with obstacles     Virtual robot's location data to navigate     Coordinates and positional awareness in programming     Problem-solving skills by programming the robot to move to specific locations based on coordinates     Algorithms that incorporate decision-making     Problem-solving strategies to design a functional program     Conditional logic blocks to control repetitive movements and tasks     Algorithms that efficiently use loops     Problem-solving strategies to optimize code for repeated actions using loops     Assessment



## Term 2

Week	Date	Topics	Assessment
1 East ANZ	21-25 April Easter Monday	Navigate the Godot interface	
	ANZAC Day: Friday	Game project following the step-by-step tutorial	
		Basic scripting and scene creation in Godot	
28 April-2 May 2	28 April-2 May	Structure a player scene, including essential	
		properties.	
		Write and debug simple code for player movement.	
5-9 May Labour Day: Monday		Create and organize a main game scene that	
		includes	
		Enemy behaviours so they interact with the player	
		Test and refine game interactions	
12-16 May <b>4</b>	12-16 May	<ul> <li>Basic HUD for a 2D game, applying best practices</li> </ul>	
		Interactive HUD elements	
		HUD and game logic	
19-23 May	19-23 May	Code and test functional power-ups	
		Collectibles displayed in the interface	
		Debug and optimize gameplay elements	
6	26-30 May	Enemies with unique behaviours	
		Implement a boss enemy	
7	2-6 June GC25: Wednesday	Implement a high-score tracking system	Project and Folio
		Scoring system	Lesson 3
	9-13 June	Fix bugs or issues during testing	
	GC25: Wednesday	Documentation that outlines the development	
		process	
9	16-20 June	Assessment Review	
10	23-27 June	Assessment Review	
	S	chool holidays: Saturday June 28 - Sunday July 13	