STAGE 4 COURSE: TECHNOLOGY MANDATORY YEAR 7 2024

Please note: This course operates on a rotating cycle, where students complete three units of work throughout the year.

	TERM 1		
	Project One Robotics Context Area: Digital Technologies Students develop knowledge and skills in the use of algorithms in the use of a general-purpose programming language to design, prod microcontroller. They document their skill-development tasks in a design and production folio. OR Grow and Thrive Context Area: Agriculture and Food Technologies Students investigate how managed environments are used to produce food and fibre. They will be introduced to basic food preparation experimentation and testing procedures students are set the challenge of creating a sustainable design solution for growing a vegetable and manage and garden bed to grow their food crop. Students develop knowledge and understanding about WHS requirements on the	on skills. Through a range of design, ole, herb or fruit. They design, produce	
	will program a Microbit microcontroller to test soil quality and moisture.		
	OR Pinball Fever OR Steady Hand Game		
TIMING Weeks: 1 – 11	Context Area: Engineered Systems Students explore how force, motion or energy are used to design and produce a motion powered pinball game OR electronic steady hand game. They develop knowledge and understanding of and investigate how force is used in simple machines to propel parts the greatest distance OR how electrical energy is used to power a game. Students will program an Microbit microcontroller to design an electronic counter.		
	UNIT OVERVIEW	ASSESSMENT	
	 All Context Areas: designs, communicates and evaluates innovative ideas and creative solutions to authentic problems or opportunities plans and manages the production of designed solutions explains how people in technology related professions contribute to society now and into the future Digital Technologies: designs algorithms for digital solutions and implements them in a general-purpose programming language explains how data is represented in digital systems and transmitted in networks Agriculture and Food Technologies: selects and safely applies a broad range of tools, materials and processes in the production of quality projects investigates how food and fibre are produced in managed environments explains how the characteristics and properties of food determine preparation techniques for healthy eating Engineered Systems: selects and safely applies a broad range of tools, materials and processes in the production of quality projects explains how the characteristics and properties of food determine preparation techniques for healthy eating Engineered Systems: selects and safely applies a broad range of tools, materials and processes in the production of quality projects explains how force, motion and energy are used in engineered systems 		

TIMING Weeks: 1 – 4 See Pro Rob Com Stud mic Meeks: 5 – 10	e above IT OVERVIEW e above oject Two botics ntext Area: Digital Technologies Idents develop knowledge and skills in the use of algorithms in the use of a general-purpose programming language to design, crocontroller. They document their skill-development tasks in a design and production folio. OR	ASSESSMENT Task Number: 1 Nature of Task: Written Portfolio and Practica Product Percentage: 100% Week: Term 2, Week 4 Reported: Semester 1	
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	experimentation and testing procedures students are set the challenge of creating a sustainable design solution for growing a vegetable, herb or fruit. They design, produce		
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 plans and manages the production of designed solutions
 explains how people in technology related professions contribute to society now and into the future
Digital Technologies:
 designs algorithms for digital solutions and implements them in a general-purpose programming language
explains how data is represented in digital systems and transmitted in networks
Agriculture and Food Technologies:
 selects and safely applies a broad range of tools, materials and processes in the production of quality projects
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Engineered Systems:
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TERM 3			
	See above		
	UNIT OVERVIEW	ASSESSMENT	
		Task Number:	
		2	
TIMING		Nature of Task:	
Weeks: 1 – 7		Written Portfolio and Practical	
Weeks. 1 – 7		Product	
	See above	Percentage:	
		100%	
		Week:	
		Term 3, Week 7	
		Reported:	
		Semester 2	
	Project Three		
	Robotics		
	Context Area: Digital Technologies		
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	Grow and Thrive		
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TIMING Weeks: 8 – 10	experimentation and testing procedures students are set the challenge of creating a sustainable design solution for growing a vegeta		
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TERM 4					
	See above				
TIMING Weeks: 1 – 10	UNIT OVERVIEW	ASSESSMENT			
	See above				