

## Year 7 - Stem 2023

TERM 1		
TIMING Weeks 1 – 4	<b>Design Thinking Activity</b> Students complete a written activity based on understanding and applying design thinking. They will unpack key terms that apply to later projects.	
	<b>UNIT OVERVIEW</b>	<b>ASSESSMENT</b>
	<ul style="list-style-type: none"> <li>• Apply the processes of working technologically, working mathematically and working scientifically skills and strategies that improve literacy and numeracy.</li> <li>• Embed opportunities for the development of 21st Century skills and general capabilities such as communication, collaboration, problem-solving, self-evaluation, ICT, critical and creative thinking, personal and social capability.</li> </ul>	Task Number: 1 Nature of Task: Written Activity Percentage: 20% Week: Week 4 Reported: Semester 1
TIMING Weeks 5 – 11	<b>Collaborative Practical and Portfolio</b> Students undertake a collaborative practical project on bridge design with the completion of an independent portfolio.	
	<b>UNIT OVERVIEW</b>	<b>ASSESSMENT</b>
	<ul style="list-style-type: none"> <li>• Apply the processes of working technologically, working mathematically, and working scientifically skills and strategies that improve literacy and numeracy.</li> <li>• Embed opportunities for the development of 21st Century skills and general capabilities such as communication, collaboration, problem-solving, self-evaluation, ICT, critical and creative thinking, personal and social capability.</li> <li>• Ensure and monitor the presence of academic rigour and ongoing assessment.</li> <li>• STEM programs are planned, developed and implemented by an Integrated STEM team with succession planning considered to ensure sustainability.</li> <li>• STEM programs are an alternative method of delivery of part of the curriculum, not compromising, or adding to, existing curriculum.</li> </ul>	

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TERM 2		
<b>TIMING</b> Weeks 1 - 2	<b>Collaborative Practical Portfolio</b> Students undertake a collaborative practical project on bridge design with the completion of an independent portfolio.	
	<b>UNIT OVERVIEW</b>	<b>ASSESSMENT</b>
	<ul style="list-style-type: none"> <li>• Apply the processes of working technologically, working mathematically and working scientifically skills and strategies that improve literacy and numeracy.</li> <li>• Embed opportunities for the development of 21st Century skills and general capabilities such as communication, collaboration, problem-solving, self-evaluation, ICT, critical and creative thinking, personal and social capability.</li> </ul>	Task Number: 2 Nature of Task: Portfolio and Practical Percentage: 80% Week: Week 2 Reported: Semester 1
<b>TIMING</b> Weeks 3 - 10	<b>Team Challenge – Practical and Research Activity</b> Students undertake a collaborative practical challenge with the completion of a research activity.	
	<b>UNIT OVERVIEW</b>	<b>ASSESSMENT</b>
	<ul style="list-style-type: none"> <li>• Apply the processes of working technologically, working mathematically, and working scientifically skills and strategies that improve literacy and numeracy.</li> <li>• Embed opportunities for the development of 21st Century skills and general capabilities such as communication, collaboration, problem-solving, self-evaluation, ICT, critical and creative thinking, personal and social capability.</li> <li>• Ensure and monitor the presence of academic rigour and ongoing assessment.</li> <li>• STEM programs are planned, developed and implemented by an Integrated STEM team with succession planning considered to ensure sustainability.</li> <li>• STEM programs are an alternative method of delivery of part of the curriculum, not compromising, or adding to, existing curriculum.</li> </ul>	

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### TERM 3

<b>TIMING</b> Weeks 1 – 10	<b>Mission to Mars Challenge</b>  Students complete an independent challenge where they research, develop and build a cart for a zipline. Students will document their progress in an independent research portfolio.	
	<b>UNIT OVERVIEW</b>	<b>ASSESSMENT</b>
	<ul style="list-style-type: none"> <li>• Apply the processes of working technologically, working mathematically, and working scientifically skills and strategies that improve literacy and numeracy.</li> <li>• Embed opportunities for the development of 21st Century skills and general capabilities such as communication, collaboration, problem-solving, self-evaluation, ICT, critical and creative thinking, personal and social capability.</li> <li>• Ensure and monitor the presence of academic rigour and ongoing assessment.</li> <li>• STEM programs are planned, developed and implemented by an Integrated STEM team with succession planning considered to ensure sustainability.</li> <li>• STEM programs are an alternative method of delivery of part of the curriculum, not compromising, or adding to, existing curriculum.</li> </ul>	Task Number: 3 Nature of Task: Portfolio and Practical Percentage: 100% Week: Week 8 Reported: Semester 2

## Year 7 - Stem 2023

TERM 4		
<b>TIMING</b> Weeks 1 – 10	<b>Independent and Team Challenges (Mini Olympics)</b> Students complete a series of independent and team challenges on Mini Olympics. They will research, develop and build solutions to a variety of problems, utilising the design thinking process.	
	<b>UNIT OVERVIEW</b>	<b>ASSESSMENT</b>
	<ul style="list-style-type: none"> <li>• Apply the processes of working technologically, working mathematically and working scientifically skills and strategies that improve literacy and numeracy.</li> <li>• Embed opportunities for the development of 21st Century skills and general capabilities such as communication, collaboration, problem-solving, self-evaluation, ICT, critical and creative thinking, personal and social capability.</li> <li>• Ensure and monitor the presence of academic rigour and ongoing assessment.</li> <li>• STEM programs are planned, developed and implemented by an Integrated STEM team with succession planning considered to ensure sustainability.</li> <li>• STEM programs are an alternative method of delivery of part of the curriculum, not compromising, or adding to, existing curriculum.</li> </ul>	