

**Varsity College  
Year 8 Engineering and Digital Solutions - Semester 1, 2023**

Week	Date	Topics	Assessment
1	23-27 January Australia Day PH - Thurs	<ul style="list-style-type: none"> <li>General class induction</li> <li>Design process and understanding hydraulics</li> </ul>	
2	30 Jan – 3 Feb Swimming Carnival - Mon	<ul style="list-style-type: none"> <li>Hydraulics as a motion and force multiplier</li> <li>Material investigation</li> </ul>	
3	6-10 February	<ul style="list-style-type: none"> <li>Evaluation of existing designs</li> </ul>	
4	13-17 February	<ul style="list-style-type: none"> <li>Developing Ideas – sketching and refining</li> </ul>	
5	20-24 February	<ul style="list-style-type: none"> <li>Producing products – manufacturing prototypes</li> </ul>	
6	27 Feb – 3 Mar	<ul style="list-style-type: none"> <li>Producing products – manufacturing prototypes</li> </ul>	
7	6-10 March GIPSA - Wednesday	<ul style="list-style-type: none"> <li>Producing products – manufacturing prototypes</li> </ul>	
8	13-17 March	<ul style="list-style-type: none"> <li>Producing products – refining prototypes</li> </ul>	<b>Draft Due</b>
9	20-24 March	<ul style="list-style-type: none"> <li>Final product testing and analysis of results</li> </ul>	
10	27-31 March Cross Country - Thurs	<ul style="list-style-type: none"> <li>Introduction to Scratch</li> </ul>	<b>Project Due</b>
<b>School Holidays: Saturday April 1 – Sunday April 16</b>			
1	17-21 April	<ul style="list-style-type: none"> <li>Scratch coding – generate efficient code using loops</li> </ul>	
2	24-28 April ANZAC Day PH - Tues	<ul style="list-style-type: none"> <li>Scratch coding – generate codes using ‘while loops’</li> </ul>	
3	1-5 May Labour Day PH - Monday GIPSA - Wednesday	<ul style="list-style-type: none"> <li>Scratch coding – create and code variables to keep score and change the display properties of sprites</li> </ul>	
4	8-12 May	<ul style="list-style-type: none"> <li>Scratch coding – generate code to create clones of sprites which will move across the screen</li> </ul>	
5	15-19 May GIPSA - Wednesday	<ul style="list-style-type: none"> <li>Scratch coding – incorporate sound effects</li> </ul>	
6	22-26 May GIPSA - Wednesday	<ul style="list-style-type: none"> <li>Project development – identify the problem and develop a solution</li> </ul>	
7	29 ay – 2 June	<ul style="list-style-type: none"> <li>Project development – creating backgrounds sprites and code</li> <li>Annotate codes</li> </ul>	<b>Draft Due</b>
8	5-9 June GIPSA - Wednesday	<ul style="list-style-type: none"> <li>Project development – obstacle animation, scoring and sound FX</li> </ul>	
9	12-16 June	<ul style="list-style-type: none"> <li>Project conclusion – game refinement and evaluation</li> </ul>	
10	19-23 June	<ul style="list-style-type: none"> <li>Peer review of games</li> </ul>	<b>Project Due</b>
<b>School Holidays: Saturday June 24 – Sunday July 9</b>			