

**Varsity College**  
**Year 10 Digital Solutions - Semester 1, 2023**

Week	Date	Topics	Assessment
1	23-27 January Australia Day PH - Thurs	<ul style="list-style-type: none"> <li>Introduction to Alice3</li> <li>Introduction to computational thinking and computer programming fundamentals: loops, if/else conditions, variables and algorithms</li> <li>Creating flowchart to visually represent an algorithm</li> </ul>	
2	30 Jan – 3 Feb Swimming Carnival - Mon	<ul style="list-style-type: none"> <li>Hand out Project task sheet</li> <li><b>Identifying and Defining:</b> research chosen <b>Digital Systems</b> topic</li> <li>Introduction to Object-oriented programming (OOP) using UML: Classes, objects and inheritance</li> <li>Using arrays in Alice3 to make characters move in unison</li> </ul>	
3	6-10 February	<ul style="list-style-type: none"> <li><b>Generating and designing:</b> creating a storyboard or annotated sketches of your interactive animation</li> <li>Triggering events and event handling</li> </ul>	
4	13-17 February	<ul style="list-style-type: none"> <li>Complete the project's investigation and design for submission</li> <li>Reusing code with procedure functions</li> </ul>	<b>Investigation &amp; Design Submission</b>
5	20-24 February	<ul style="list-style-type: none"> <li><b>Producing and implementing:</b> making the interactive animation</li> </ul>	
6	27 Feb – 3 Mar	<ul style="list-style-type: none"> <li>making the interactive animation</li> </ul>	
7	6-10 March GIPSA - Wednesday	<ul style="list-style-type: none"> <li>making the interactive animation</li> </ul>	
8	13-17 March	<ul style="list-style-type: none"> <li><b>Evaluating:</b> complete an evaluation report, including a flowchart and UML aligned to code examples from the interactive animation</li> </ul>	<b>Interactive animation &amp; Evaluation Submission</b>
9	20-24 March	<ul style="list-style-type: none"> <li>Introduction to Python programming</li> </ul>	
10	27-31 March Cross Country - Thurs	<ul style="list-style-type: none"> <li>Fundamentals of computer programming: variables, arrays, and reusable functions</li> </ul>	
<b>School Holidays: Saturday April 1 – Sunday April 16</b>			
1	17-21 April	<ul style="list-style-type: none"> <li>Python programming review: variables, arrays, loops, if/else conditions, and functions</li> </ul>	
2	24-28 April ANZAC Day PH - Tues	<ul style="list-style-type: none"> <li>UML diagrams and Object-oriented programming: Classes, objects and inheritance</li> </ul>	
3	1-5 May Labour Day PH - Monday GIPSA - Wednesday	<ul style="list-style-type: none"> <li>Hand out group project task</li> <li><b>Generating and designing:</b> developing wireframes</li> <li>Visual communication, CARP principles, and Useability principles</li> </ul>	
4	8-12 May	<ul style="list-style-type: none"> <li>PyQt setup and Graphical User Interface (GUI) design principles using wireframes</li> </ul>	
5	15-19 May GIPSA - Wednesday	<ul style="list-style-type: none"> <li><b>Producing and implementing:</b> using GUI with PyCharm</li> </ul>	<b>Project Draft Due</b>
6	22-26 May GIPSA - Wednesday	<ul style="list-style-type: none"> <li><b>Acquiring, managing and analysing of data:</b> Introduction to databases, data analysis, data security &amp; big data</li> </ul>	
7	29 May – 2 June	<ul style="list-style-type: none"> <li><b>Evaluating:</b> consider GUI application potential for innovation and enterprise</li> </ul>	<b>Project Submission</b>
8	5-9 June GIPSA - Wednesday	<ul style="list-style-type: none"> <li><b>Privacy and security:</b> current &amp; future cyber security considerations</li> </ul>	
9	12-16 June	<ul style="list-style-type: none"> <li>Exploring cyber security threat models</li> </ul>	
10	19-23 June	<b>Exam Block</b>	
<b>School Holidays: Saturday June 24 – Sunday July 9</b>			