

Varsity College Year 9 Engineering – Semester 1, 2024

Week	Date	Topics	Assessment
1	22-26 January O-Week Australia Day PH Fri	Exploring the design problem – co2 introduction and Newton's Laws of Motion	
2	29 Jan-2 Feb	Exploring the design problem – drag, mass and friction	
3	5-9 February Swimming Carnival - Thurs	Exploring the design problem – design envelope, Gantt chart, success criteria and materials investigation	
4	12-16 February	Develop ideas – existing designs, PMIs and sketching	
5	19-23 February	Develop ideas – existing designs, PMIs and sketching	
6	26 Feb-1 Mar GC24 - Wednesday	Develop ideas – Solid Edge modelling (individual)	
7	4-8 March	Develop ideas – Solid Edge modelling (individual)	Exam Lesson 3
8	11-15 March	 Develop ideas – Solid Edge modelling (individual) Exam revision 	
9	18-22 March NAPLAN GC24 - Thursday	Develop ideas – virtual prototyping (virtual wind tunnel) and redesign	
10	25-29 March Good Friday PH	Develop ideas – virtual prototyping (virtual wind tunnel), redesign and compare/contrast to partner's design	
	S	chool holidays: Friday March 29 - Sunday April 14	
1	15-19 April Cross Country - Wed	Develop ideas – virtual prototyping (virtual wind tunnel) and compare/contrast to partner's design	
1 2	15-19 April Cross Country - Wed 22-26 April	Develop ideas – virtual prototyping (virtual wind	
	15-19 April Cross Country - Wed 22-26 April	Develop ideas – virtual prototyping (virtual wind tunnel) and compare/contrast to partner's design	
2	15-19 April Cross Country - Wed 22-26 April GC24 - Tuesday Anzac Day PH - Thurs 29 Apr-3 May 6-10 May Labour Day PH - Mon	Develop ideas – virtual prototyping (virtual wind tunnel) and compare/contrast to partner's design Generate – manufacture and assemble car Generate – manufacture and assemble car Generate – prototyping (actual wind tunnel and smoke tunnel)	
2	15-19 April Cross Country - Wed 22-26 April GC24 - Tuesday Anzac Day PH - Thurs 29 Apr-3 May 6-10 May Labour Day PH - Mon 13-17 May	Develop ideas – virtual prototyping (virtual wind tunnel) and compare/contrast to partner's design Generate – manufacture and assemble car Generate – manufacture and assemble car Generate – prototyping (actual wind tunnel and	Draft
2 3 4 5 6	15-19 April Cross Country - Wed 22-26 April GC24 - Tuesday Anzac Day PH - Thurs 29 Apr-3 May 6-10 May Labour Day PH - Mon 13-17 May 20-24 May	 Develop ideas – virtual prototyping (virtual wind tunnel) and compare/contrast to partner's design Generate – manufacture and assemble car Generate – manufacture and assemble car Generate – prototyping (actual wind tunnel and smoke tunnel) Generate – working drawings, hypothesis and pretesting calculations Evaluation – analysis of final testing results 	
2 3 4 5	15-19 April Cross Country - Wed 22-26 April GC24 - Tuesday Anzac Day PH - Thurs 29 Apr-3 May 6-10 May Labour Day PH - Mon 13-17 May 20-24 May 27-31 May	 Develop ideas – virtual prototyping (virtual wind tunnel) and compare/contrast to partner's design Generate – manufacture and assemble car Generate – manufacture and assemble car Generate – prototyping (actual wind tunnel and smoke tunnel) Generate – working drawings, hypothesis and pretesting calculations 	Draft
2 3 4 5 6	15-19 April Cross Country - Wed 22-26 April GC24 - Tuesday Anzac Day PH - Thurs 29 Apr-3 May 6-10 May Labour Day PH - Mon 13-17 May 20-24 May 27-31 May 3-7 June	 Develop ideas – virtual prototyping (virtual wind tunnel) and compare/contrast to partner's design Generate – manufacture and assemble car Generate – manufacture and assemble car Generate – prototyping (actual wind tunnel and smoke tunnel) Generate – working drawings, hypothesis and pretesting calculations Evaluation – analysis of final testing results 	
2 3 4 5 6 7	15-19 April Cross Country - Wed 22-26 April GC24 - Tuesday Anzac Day PH - Thurs 29 Apr-3 May 6-10 May Labour Day PH - Mon 13-17 May 20-24 May 27-31 May	 Develop ideas – virtual prototyping (virtual wind tunnel) and compare/contrast to partner's design Generate – manufacture and assemble car Generate – manufacture and assemble car Generate – prototyping (actual wind tunnel and smoke tunnel) Generate – working drawings, hypothesis and pretesting calculations Evaluation – analysis of final testing results Evaluation – recommendations 	Draft