

Unit 1	Key areas	Chapter resources	Practical resources	Equipment/ tools	assessments
Mechanical Systems	OC1 On completion of this unit the student should be able to describe and use basic engineering concepts, principles and components, and using selected relevant aspects of the Systems Engineering Process, design and plan a mechanical or an electro-mechanical system.	Pat o' Neil System Engineering Chap 1-4 Work book System Engineering Steve Penna Web resources : www.technologystudent.com Click view: (need an account to use this) http://online.clickview.com.au/mylibrary/videos/8b636464-53a7-341e-a57e-986d1bb6a564 http://online.clickview.com.au/mylibrary/videos/3356d8d4-8d5b-dd66-a63d-b8572f024dd2 Plus many under the design and technology tab	Introduce Autodesk inventor to design their 3D model or any other available 3D modeling software Or Yenka simulation software (mechanisms)	Access to Laptops/ etc	Folio (Chap 9 Pat O' Neil) and Steve Penna workbook not to the depth as year 12 but students start understanding the folio requirements breakdown the folio tasks according to Y12 folio (eight) selection criteria: refer to the attachments. VCE Systems Engineering current study design is for 2013-2017 period. Test: Mechanical systems
	OC2: On completion of this unit the student should be able to make, test and evaluate a mechanical or an electro-mechanical	As above	Kits from Scorio technology and Altronics	Hand saws , Screw drivers Scissors glue gun soldering	Folio completion As per the criterion in the study design 2013-17

	<p>system using selected relevant aspects of the Systems Engineering Process.</p>		<p>If access to lego minstorm or other physics equipment students can be encouraged to try out different concepts of simple machines pulleys, hydraulics pneumatics etc</p> <p>Project example E.g design , plan produce test and evaluate a dragster. (2 students per team) students are to use the same motor and battery so the focus is purely on the mechanical aspect a race can be conducted to test the best dragster Materials used can be balsa wood (</p>	<p>iron</p>	<p>Semester Exam Covering both the project and the theory from chap 1 to 4</p>
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