

Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 1	Summer Term 2
Unit R038 Principles of engineering design Designing process	Unit R038 Principles of engineering design Communicating design outcomes	R039 Communicating Designs Externally set assignment	R039 Communicating Designs Externally set assignment	Unit R038 Principles of engineering design Design requirements	R40 Design, evaluation and modelling Externally set assignment
Assessment		Key Concepts/ Skills		Reading	
<p>Students will complete end of topic written assessments each half term.</p> <p>Students will also be assessed on their drawing and practical skills.</p> <p>Students will complete one externally set assignment this year</p>		<p>R038 Designing processes Designing requirements Communicating design outcomes Evaluating design ideas</p> <p>R039 Manual production of freehand sketches Production of engineering drawings Use of computer aided design (CAD)</p> <p>R040 Product evaluation Modelling a prototype</p>		<ul style="list-style-type: none"> - Project brief and specification - Contextual research pages (text + images) - Exam papers - Secondary research - Design work analysis/evaluation - Marks schemes - BUG the question 	
Enrichment		Careers		Useful resources and revision	
<ul style="list-style-type: none"> • Trip to Silverstone • Trip to Warwick University to take part in the Design and Make challenge • Enrichment clubs after school 		<p>Mechanical Engineer, Product Design Engineer, Manufacturing Engineer, Automotive Engineer, Aerospace Engineer, Robotics Engineer, Industrial Engineer, CAD Designer / CAD Technician, Renewable Energy Engineer, Biomedical Engineer, Materials Engineer</p>		<ul style="list-style-type: none"> - Knowledge Organisers - Past papers - https://www.ocr.org.uk/qualifications/cambridge-nationals/engineering-design-level-1-2-j822/assessment/ 	