

Engineering Year 10

Term 1	Term 2	Term 3
Practice Drawing Task including sketching, shade tone and texture and material science	<p>Production of exploded drawing in CAD and by hand.</p> <p>Production of CAD drawing of final concept using Autodesk inventor.</p>	<p>Preparation for R040. Skills to include understanding of risk assessments and FPT to gain knowledge of CAD and workshop skills.</p> <p>Scheme 3A to be followed to cover knowledge required for R038.</p>
Production of 6 concepts, modelling of chosen concept, development of concept and orthographic projection of chosen concept using CAD and by hand.	Preparation for R040. Skills to include disassembly of an existing product. Theory to include content from past papers.	Begin R040 when released on 1st June 2023. Content to be decided.

Assessment		
Internal assessment Controlled assessment (25%)	Internal assessment Controlled assessment (25%)	Internal assessment Controlled assessment (25%)

Engineering Year 11 (2022-23)

Term 1	Term 2	Term 3
Hand Drawing and Digital Annotation	Using hand tools (light) and digital write up Lathe and Miller and Hand Tools and digital write up Past Papers (intervention after school)	Targeted intervention for specific students based on prior CW and exam attainment Resubmission of: R107 R106 Or sit external exam (R105)
First 3 weeks CAD and using hand tools (light) Practice joint cutting and drilling Start practical light project (H&S, Tools and materials and practical aspects R108)	Targeted intervention for specific students based on prior CW and exam attainment Specific students to retake R105 R106 R107	

Assessment		
Controlled assessment – 25%		Exam

Engineering Year 11 (2023-24)

Term 1	Term 2	Term 3
Topic Area 1: Designing processes	Topic Area 3: Communicating design outcomes	Consolidate learning topics 1- 4 then students sit External Exam
Topic Area 2: Design requirements	Topic Area 4: Evaluating design ideas	

Assessment

Internal assessment

Internal assessment

External assessment