

Year 11	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Content / topics	Exploring Engineering Sectors	Exploring Engineering skills through the design process	Exploring Engineering skills through the design process	Plan the manufacture and safely reproduce, inspect and test a given engineering product	Investigate a given engineered product using disassembly techniques	Synoptic paper: Responding to an engineering brief.
Skills	Researching engineering sectors, identifying links between sectors, investigating engineering organisations, investigating job roles and career progression	Analysing an engineering brief and producing a specification, developing designs using 2D and 3D sketches, using 2D CAD and physical modelling	Collating a design portfolio, carrying out a design review, giving feedback in design reviews of others, Evaluating own design. Suggesting improvements.	Plan for the safe manufacture of a component, prepare a list of tools and equipment, risk assess the process, make the component, quality inspect the component.	Safe use of disassembly techniques, removal of semi-permanent fixings, parts removal and layout, replacement of non-reusable fixings, safe use of tools for disassembly/assembly.	Understand how to respond to an engineering brief, select skills and techniques, apply skills, and evaluate outcomes.
Assessments / PPEs	Baseline assessment test and review of skills at half term	Pre Public Exam 1 and half term assessment of project	Pre public exam 2 and half term assessment of project	End of unit test and assessment of made component	Assessment of evidence portfolio	