

Design Technology Curriculum Overview - Year 12

	Unit	Details
Autumn One	Timber Joints	Pupils will develop their knowledge of material properties and investigate the performance characteristics of timbers, focusing on wood enhancement, processes and finishing. Pupils will be selecting appropriate tools, equipment and processes to create a variety of different timber joints which will help prepare pupils to make conscious design and manufacturing decisions in future projects.
Autumn Two	Aluminium Animals	Pupils will explore the performance characteristics of metals, focusing on metal enhancement, processes and finishing. Pupils will explore the iterative design process to design, develop and manufacture an animal made from one piece of aluminium. This short project will help pupils to test and evaluate the strengths of their design and encourage prototype development and accuracy in design and manufacture.
Spring One	Graphic Packaging	Pupils will investigate the performance characteristics of papers and boards and polymers through designing and manufacturing packaging for a local brand. Through this project pupils will explore material enhancement, forming, finishing, and printing processes for polymers and papers and boards. Pupils will develop skills in design communication, enterprise and marketing in the development of products.
Spring Two	Speaker Project (Mock NEA)	Pupils will be given a practice NEA which we will work through together as a class, allowing students to understand the coursework in more detail, receive guidance and structure before being able to complete their NEA independently in the summer term two. Pupils will receive a context to explore and analyse, create their own problem, design brief and specification to work on.
Summer One		Pupils will further research their chosen design problem, creating initial design ideas and selecting one to develop further into a final design and manufacturing specification. Pupils will receive ongoing feedback and develop the confidence to independently approach the A Level NEA.
		Pupils will also be covering exam content focusing on designing and making principles.
Summer Two	NEA	Pupils will choose their own project context to begin to explore for their A Level NEA. Pupils will work independently and will focus on section A, Identify, investigate & outline design possibilities.