



Design Technology Curriculum Overview - Year 12

	Unit	Details
Autumn One	Ikea Project	Pupils will be given a project where they have to redesign an Ikea Lack table, using all of the materials and components, to fit their clients brief. This is an extended project which will develop pupils' understanding of the iterative design process, utilising ongoing designing, testing and evaluating until an optimum outcome is achieved. Pupils will also be focusing on designing and making principles covering the following topics; iterative design process, design theory, How technology and cultural changes can impact on the work of designers, and Design processes.
Autumn Two	Ikea Project	Pupils will begin manufacture of their final prototype, developing a high level of skill using tools, machinery and manufacturing processes. For submission pupils will also be required to create 3 presentation boards to go alongside their prototype, explaining their design, development process and how it has met the client's specification. Pupils will also be focusing on technical principles covering the following topics; Prototype development, Critical analysis and evaluation, Selecting appropriate tools, equipment and processes, Accuracy in design and manufacture, and Responsible design.
Spring One	Mini Design Projects	Pupils will develop a range of technical and manufacturing skills through a series of mini design projects, focusing on material properties, addition, wastage and reformation processes, joining methods and material finishes. Projects will focus on the following material categories; Timbers, Papers and Cards, Metals, Polymers, Smart and Modern Materials. Pupils will also be focusing on designing and making principles covering the following topics; investigating materials and their applications, performance characteristics of materials, enhancement of materials, reforming, redistribution and addition processes.
Spring Two	Mini Design Projects	Pupils will develop a range of technical and manufacturing skills through a series of mini design projects, focusing on material properties, addition, wastage and reformation processes, joining methods and material finishes. Projects will focus on the following material categories; Timbers, Papers and Cards, Metals, Polymers, Smart and Modern Materials Pupils will also be focusing on designing and making principles covering the following topics;the uses of finishes, modern commercial industrial practice, digital design and manufacture, health and safety, design for manufacturing, maintenance, repair and disposal.
Summer One	Exam Content	Pupils will focus on the exam content of the AQA Design and Technology GCSE covering the two main categories; technical principles and designing and making principles.
Summer Two	Exam Content and 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.