

## Year 11 DESIGN TECHNOLOGY

### Overall Intent:

In Year 11 Design Technology students continue to gain experience designing for a client and working towards a brief. The course encourages students to communicate their ideas and development on their coursework succinctly. Students are given a context and will work independently through a portfolio of research, design ideas, development and modelling to then make a final prototype. As well as their NEA (non-exam assessment/ coursework) students continue to develop their theory knowledge and understanding that will prepare them for their exam. Students will be encouraged to demonstrate their understanding of both designing and making principles in a wide range of areas such as the investigation of primary and secondary data, selection of materials and components, tolerances and material management.

	<b>Autumn 1</b>	<b>Autumn 2</b>	<b>Spring 1</b>	<b>Spring 2</b>	<b>Summer 1</b>	<b>Summer 2</b>
<b>Assessment</b>	Links to exam questions. End of learning objective testing. End of theory topic assessments	Exam preparation End of theory topic assessments	End of learning objective testing	End of learning objective testing End of theory topic assessments	Links to exam questions End of learning objective testing End of theory topic assessments	Final GCSE exam
<b>Key learning aims – knowledge and skills</b>	Continuation of design portfolio (NEA). Choosing a product outcome, doing Indepth research into client, design styles and companies, writing a detailed specification for their product proposal. Pupils to evaluate their	Continuation of design portfolio (NEA), as well as This will include looking at developing their designs though modelling. Improvement of functionality, ecological footprints.' and design context.	Continuation of design portfolio (NEA). Manufacturing of prototype, how to programme and work the laser cutter and the 3D printer, demonstration of health and safety awareness in the workshop when	Exam preparation through specimen papers and mark schemes. This will include looking at working with others, the work of others, communication of design ideas, primary/secondary research.	Exam preparation which will include looking at mechanical devices, energy, storage, composition materials, electronical systems.	Final revision of theory topics.

	research and what they have learned from it		producing their final prototype.			
<b>Topic/area of study</b>	NON-EXAMINED ASSESSMENT (NEA): MAKING PRINCIPLES	NEA: COMMON/SPECIALIST TECHNICAL PRINCIPLES	NEA: CAD/CAM MANUFACTURING OF PROTOTYPE	EXAM PREPARATION: DESIGNING PRINCIPLES	EXAM PREPARATION: ENERGY, SYSTEMS AND DEVICES	EXAM PREPARATION