

## Year 11 Design Technology

In Year 11, students begin the 50% NEA (Non-Exam Assessment) and work on exam questions. The exam board issues a list of 'contexts' which can be used by students to design and make a product. Students must use a real client, explore the context and design and make a functioning prototype that can then be evaluated. Students are assessed on their ability to research, use clients, use a range of design and development techniques, evaluate based on their knowledge of tools, materials and processes and create a final prototype. 20% of the NEA is awarded for 'making' so the demand for students to complete a well-presented, detailed and well-structured portfolio is very high. Using the knowledge gained in Years 7-10 and the independent learning schedule in Years 9 and 10, students will also work through theory sessions and exam questions in preparation for the end of year written paper (50%). The paper includes questions about 'core' principles (including some textiles questions), technical principles and design and make principles.

Methods of deepening and securing knowledge:	
Spaced practice	Spaced practice is evident in the structure of theory sessions, independent learning questioning and students re-visiting work completed in Years 7-10 to influence their NEA.
Retrieval practice	The ability to retrieve information is even more important in Year 11. Students are asked questions about work completed as early as Year 7 and students must be able to link their knowledge throughout Design and Technology and use it to answer questions and make decisions about the design and make process of their NEA.
Elaboration	Throughout the NEA, students must elaborate. Marks are awarded for analysis and evaluation students have to design something with real-life clients and links, and so must be able to elaborate and explain their decision making in detail.
Interleaving	Exam questions will require students to dip into information learned throughout Years 7 – 11 and should train students to make links between work completed in previous years ready for the written paper. Students demonstrating good interleaving skills will be able to recall information from various topics, projects or sections of work and interleave them into their exam answers or analysis for both the NEA and the written paper.

	Autumn term 1	Autumn term 2	Spring term 1	Spring term 2	Summer term 1	Summer term 2
Topic(s)	<b>NEA: Research</b> - Explore contexts - Research existing products - Discussions with clients - Create design briefs	<b>NEA: Designing, modelling and prototyping</b> - Create initial ideas and iterations - Model and prototype	<b>NEA: Making</b> - Make prototype - Develop prototype based on feedback from client and constraints/limitations	<b>NEA: Making and Evaluating</b> - Finalise prototype, apply finishes and present to client - Obtain feedback and evaluate	<b>Exam Revision:</b> - Students complete final theory sessions for the examination	<b>Exam preparation</b>

	- Create a design specification	- Develop ideas based on feedback and analysis - Begin to finalise designs, create working drawings and cutting lists	- On-going quality checks and developments	- Modify and create further iterations - Feedback from client		
Assessment	- Assessment of Sections A and B	- Assessment of Sections C and D	- Assessment of Section E	- Final assessment of portfolio and product	- GCSE examination	
CEIAG ( <i>Careers that are linked to that topic</i> )	- Careers linked to research, design and analysis and careers in product design that may involve making prototypes	- Careers linked to research, design and analysis and careers in product design that may involve making prototypes				

**Independent Learning:**

Using the Revision Guide, students complete past exam questions and revisit work completed in Year 9 and 10. Students will also be encouraged to complete sections of the NEA ready for the various assessment points throughout the year.