

# Design Technology Year 11

We will be learning about...						
During this unit you will be undertaking your NEA, coursework, as well as learning fundamental skills of design and its process. This independent unit will form your chosen area of exploration, set out your brief and specification, and you will create informed design ideas for your chosen project. Throughout the following weeks you will gain skills in research, interpretation and communication of people, products and technical knowledge.						
Week	Key Learning			Homework		
1	<ul style="list-style-type: none"><li>• User constraints and interpretation of data</li><li>• Quick idea generation to solve or address user problem</li><li>• Annotation which makes clear links to communicate choices</li></ul>			<ul style="list-style-type: none"><li>• Additional research specific to project</li></ul>		
2	<ul style="list-style-type: none"><li>• Review of design ideas through rankings</li><li>• Prioritising design proposal through feedback and development</li><li>• CAD development of initial ideas</li></ul>			<ul style="list-style-type: none"><li>• Material types for manufacture</li></ul>		
3	<ul style="list-style-type: none"><li>• Iterative design, combining sketches, CAD and physical modelling</li><li>• How to identify and development to prototype</li><li>• Appropriate sizing and scale with appropriate material choice</li></ul>			<ul style="list-style-type: none"><li>• Research planning and GANTT Charts</li></ul>		
4	<ul style="list-style-type: none"><li>• Safe working practices</li><li>• Marking and preparation of material</li><li>• Manufacture with general workshop tooling</li></ul>			<ul style="list-style-type: none"><li>• Working properties and performance characteristics of materials</li></ul>		
5	<ul style="list-style-type: none"><li>• Marking and preparation of material for further components</li><li>• Manufacture with workshop specific tooling</li><li>• Evidence of manufacture working log</li><li>• Core material choices and properties</li></ul>			<ul style="list-style-type: none"><li>• Design communication techniques and application</li></ul>		
6	<ul style="list-style-type: none"><li>• Manufacturing processes of prototype</li><li>• Assembly techniques</li><li>• Joining methods</li><li>• Social and moral considerations of material choices</li></ul>			<ul style="list-style-type: none"><li>• Design influences of past and present designers</li></ul>		
Key Vocabulary						
feasibility	constraint	proposal	workplane	chuck	tolerance	fanuc

## Enrichment opportunities:

Students do have the option to attend catch up sessions if needed during lunchtimes or after school if they feel they need more time and support on their practical product.

## How can you help?

Parents can support their child in DT by talking to them about the project they are undergoing and encourage them to do their best. It is also helpful if students are provided with a quiet place to do their homework tasks.

Excellent links can be found on the internet such as

[www.technologystudent.com](http://www.technologystudent.com)

[www.senecalearning.com](http://www.senecalearning.com)

[www.bbc.co.uk/bitesize/subjects](http://www.bbc.co.uk/bitesize/subjects) then selecting Design Technology.