



Curriculum Map Year 7

Engineering

The ADT curriculum is delivered through a carousel with each student engaged in one subject per term.

Curriculum Intent:

	Engineering		Art		Food Technology	
	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Unit of work	<p>Project: Desk Tidy</p> <p>Learners develop an understanding of the iterative design process through project based learning. Through this unit of work learners take on the role of a design engineer working to meet the needs of a consumer through the design and manufacture of a suitable product. Learners develop an understanding of how a designer gathers information in order to develop a design specification. Learners use a range of sources from primary and secondary research as well as the use of biomimicry, from which initial product sketches can be produced. Learners develop an understanding of hazards and safe working practices when working within a workshop through the use of selected hand tools and machinery in order to produce a final product. Learners develop an understanding of the importance of reviewing designs through evaluation in order for designs to develop and evolve.</p>					
Core Skills	<ul style="list-style-type: none"> Analysis- of current products through the use of ACCESS FMM Numerical Skills- Use of the metric measurement system Design skills- conveying information through free hand sketches, annotations and oblique projection Workshop skills- The safe selection and use of woodworking hand tools and key machinery. Literacy Skills- annotation of graphic work, design specification writing and product investigation. Decision making Evaluating- of a final design 					
Core Knowledge	<ul style="list-style-type: none"> The iterative design process Designing to meet the needs of a 3rd party (client) Material selection- Timers Safe working practices Computer aided design 					
Assessment & Feedback	<p>Assessment 1- Students undertake an initial assessment on the iterative design process. DIRT sessions are used to allow students to develop their understand and look at how to move forward.</p> <p>Interim assessment (2)- Students undertake an interim assessment on the calculation of areas when selecting materials as well as the communication of design ideas. DIRT sessions are used to allow students to develop their understand and look at how to move forward</p>		<p>Summative assessment (3) Learners undertake a final summative assessment , assessing both the students knowledge of all topics covered as well as a practical element.</p>			
Link to prior learning						
Outside learning/trips						