

Year 12 structure: A Level D&T

	Skills based learning (including structuring coursework).	Theory modules	
Autumn 1	<p>Design and make project: All skills taught in KS4 recovered with students creating a children's alien and rocket toy (see PowerPoint for tools and equipment to be covered).</p> <ul style="list-style-type: none"> • Design and development skills (3 weeks) - inc. research. • Plan for manufacturing (week 4). • Realising final design idea (week 5 onwards). 	<p>Topic 1: Materials (1.1 to 1.7)</p> <p>Topic 2: Performance characteristics of materials (2.1)</p>	
Autumn 2	<p>Continuation of design and make project:</p> <ul style="list-style-type: none"> • Manufacturing (week 1-4) • Evaluation (week 5-6) <p>Brainstorm ideas for NEA.</p>	<p>Topic 4: digital technologies.</p> <p>Topic 5: factors influencing the development (5.1 to 5.4)</p>	
Spring 1	<p>Identification and investigation of design possibility (2 weeks)</p> <p>Investigation of needs and research (4 weeks)</p>	<p>Topic 6: effects of technological developments</p> <p>Topic 3: Processes, techniques and specialist tools (3.1)</p>	
Spring 2	<p>Specification and brief (1 week)</p> <p>Design ideas (sketches) (2 weeks)</p> <p>Design ideas (models) (3 weeks)</p>	<p>Topic 3: Processes, techniques and specialist tools (3.1)</p>	
Summer 1	<p>Review of design ideas (1 week)</p> <p>Development of design ideas (week 2-6)</p>	<p>Topic 3: Processes, techniques and specialist tools (3.1)</p>	
Summer 2	<p>Development of design ideas (week 1-6 – work experience during this time).</p>	<p>Topic 3: Processes, techniques and specialist tools (3.1)</p>	

Year 13 structure: A Level D&T

	Skills based learning (including structuring coursework).	Theory modules	
Autumn 1	<p>Complete development of design ideas (2 weeks)</p> <p>Review of development ideas (1 week)</p> <p>Final design solution – five pages including orthographic project, 3D rendering and exploded diagram (4 weeks)</p>	<p>Topic 7: Safe working practices, potential hazards and risk assessment (7.1)</p> <p>Topic 8: Feature of manufacturing industries (8.1 – 8.3)</p>	
Autumn 2	<p>Review of final design idea + plan of make/manufacturing specification.</p> <p>Manufacturing prototype.</p> <p>(Mock exams during this period)</p>	<p>Topic 9: design for maintenance for a cleaner environment.</p> <p>Topic 10: current legalisation</p>	
Spring 1	<p>Manufacturing prototype (6 weeks)</p>	<p>Topic 11: Information handling, modelling and forward planning.</p> <p>Topic 12: Further processes and techniques.</p>	
Spring 2	<p>Manufacturing prototype (1 week)</p> <p>Testing and evaluating (5 weeks)</p>	<p>Topic 12: Processes, techniques and specialist tools (3.1)</p>	
Summer 1	All exam topics covered again (HE covers topic 3 with workshop practicals).		