

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topics	CORE CONTENT	CORE CONTENT	CORE CONTENT	CORE CONTENT	SPECIALISM: TIMBERS	SPECIALISM: TIMBERS
What will students during this unit?	<p><u>SENECA LEARNING : 1.1</u> New and Emerging Technologies</p> <p><u>SENECA LEARNING : 1.2</u> Energy Generation and Storage</p> <p>Skills Block: Introduction to practical skills and a range of equipment post lockdown. Health and Safety in the workshop. - Housing joint - Chisel - Bench hook - Drilling techniques - Presentation skills for recall Careers and Aspirations - link to Tameside College</p> <p><u>SENECA LEARNING : 1.3</u> Development in New Materials</p> <p><u>SENECA LEARNING : 1.4</u> Mechanical Devices</p>	<p>Mobile Phone Holder - Polymers - 2D Design - Laser cutting - Engraving - Strip heater / forming - Problem solving - Development</p> <p>Seasonal project: Link with Community lead - Cultural capital -working towards raising money for Willow Wood Hospice, assisting at the community festive event. Practical skills: Reindeer task - A3 write up: Forstner bit / Flat bit / Hand saw / Power drill - Hard woods - Soft woods - Seasoning - Drilling - Forstner bit - Dowel joint - Adhesives</p> <p>Timber - Hardwoods, softwoods, manufactured timbers – hardness, toughness, durability.</p> <p><u>SENECA LEARNING : 1.5</u> Systems Approach to Designing</p>	<p><u>SENECA LEARNING: 1.6</u> Materials categories.</p> <p><u>SENECA LEARNING: 1.7</u> Physical and Working Properties</p> <p>Isometric Project How to sketch and use CAD - Freehand - Isometric - Google Sketchup - Google Slides - Orthographic - Google Sketchup Practical - problem solving tools selection to manufacture up to 6 of the Isometric shapes,</p> <p>Introduction to the DOODLE BOOK. -Allowing students to reflect on prior learning from Autumn Term 1 Autumn Term 2 Spring Term 1</p> <p>Begin the process of building REVISION CARDS to further support the retaining of key learning. -initially based on the Key Questions from the Textbook,</p>	<p><u>Isometric practical continued,</u></p> <p><u>SENECA LEARNING: 1.8</u> The work of others Test covering: - TESLA - Apple - Heatherwick studio - Alessi - Pixar - Raymond Loewy - Joe Casley Hayford - Zaha Hadid</p> <p><u>SENECA LEARNING: 1.9</u> Design Strategies</p> <p><u>SENECA LEARNING: 1.10</u> Communication of Design Ideas - Orthographic Projection -Exploded view -Magnification points</p> <p>REVISION CARDS to further support the retaining of key learning. -initially based on the Key Questions from the Textbook,</p>	<p><u>SENECA LEARNING: 2.1</u> The use of Materials</p> <p><u>SENECA LEARNING: 2.2</u> Forces and Stresses</p> <p><u>SENECA LEARNING: 2.3</u> Surface Treatment and Finishes</p> <p><u>SENECA LEARNING: 2.4</u> The use of Materials</p> <p><u>SENECA LEARNING: 2.5</u> Forces and Stresses</p> <p><u>SENECA LEARNING: 2.6</u> Stock Forms Types and Sizes</p> <p>LAUNCH NEA 50% -Investigation of 3 themes. -Group Analysis -Researching selected theme. -Client / user focus.</p> <p>REVISION CARDS to further support the retaining of key learning. -initially based on the Key Questions from the Textbook,</p>	<p><u>SENECA LEARNING: 2.7</u> Forces and Stresses</p> <p><u>SENECA LEARNING: 2.8</u> Selection of Materials</p> <p><u>SENECA LEARNING: 2.9</u> Ecological and Social Footprint</p> <p>NEA FOCUS investigation (8 MARKS) -User wants and needs -Existing products -Client Questionnaire -Mood board -Materials Research -Specific Research -Industrial manufacturing Methods</p> <p>REVISION CARDS to further support the retaining of key learning. -initially based on the Key Questions from the Textbook,</p>

When will students be assessed?	2-3 weeks Revision docs and Seneca A3 sheets with feedback and working towards grade Verbal feedback during practical lessons	2-3 weeks Revision docs and Seneca A3 sheets with feedback and working towards grade Verbal feedback during practical lessons	2-3 weeks Revision docs and Seneca A3 sheets with feedback and working towards grade Verbal feedback during practical lessons	2-3 weeks Revision docs and Seneca A3 sheets with feedback and working towards grade Verbal feedback during practical lessons	2-3 weeks Revision docs and Seneca A3 sheets with feedback and working towards grade Verbal feedback during practical lessons	2-3 weeks Revision docs and Seneca A3 sheets with feedback and working towards grade Verbal feedback during practical lessons
How will students be assessed?	A3 / Computer write ups of skills and knowledge evidenced in students A3 Folder Seneca Learning	A3 / Computer write ups of skills and knowledge evidenced in students A3 Folder Seneca Learning	A3 / Computer write ups of skills and knowledge evidenced in students A3 Folder Seneca Learning	A3 / Computer write ups of skills and knowledge evidenced in students A3 Folder Seneca Learning	A3 / Computer write ups of skills and knowledge evidenced in students A3 Folder Seneca Learning	Use of 'Mote' to give feedback to students on their NEA; allowing students to make further progress independently.
Key Vocabulary	As underlined above Use of the 'Do Now' booklets to revisit key terminology and focus.	As underlined above Use of the 'Do Now' booklets to revisit key terminology and focus.	As underlined above Use of the 'Do Now' booklets to revisit key terminology and focus.	As underlined above Use of the 'Do Now' booklets to revisit key terminology and focus.	As underlined above Use of the 'Do Now' booklets to revisit key terminology and focus.	As underlined above Use of the 'Do Now' booklets to revisit key terminology and focus.
Homework opportunities to broaden or deepen student knowledge	Home Learning weekly tasks set through Seneca Learning. -Technology Student -Revision cards -Opportunity to review Seneca Learning scores -Personal Textbook	Home Learning weekly tasks set through Seneca Learning. -Technology Student -Revision cards -Opportunity to review Seneca Learning scores -Personal Textbook	Home Learning weekly tasks set through Seneca Learning. -Technology Student -Revision cards -Opportunity to review Seneca Learning scores -Personal Textbook	Home Learning weekly tasks set through Seneca Learning. -Technology Student -Revision cards -Opportunity to review Seneca Learning scores -Personal Textbook	Home Learning weekly tasks set through Seneca Learning. -Technology Student -Revision cards -Opportunity to review Seneca Learning scores -Personal Textbook	Home Learning weekly tasks set through Seneca Learning. -Technology Student -Revision cards -Opportunity to review Seneca Learning scores -Personal Textbook
Links to the National Curriculum	Full relation to Core content Edexcel Specification in line with NC	Full relation to Core content Edexcel Specification in line with NC	Full relation to Core content Edexcel Specification in line with NC	Full relation to Core content Edexcel Specification in line with NC	Full relation to TIMBERS SPECIALISM content Edexcel Specification in line with NC	Full relation to TIMBERS SPECIALISM content Edexcel Specification in line with NC