



Subject Intent								
<p>In Design and Technology we encourage our pupils to combine practical and technological skills with creative thinking to design and make products and systems that meet pupil’s needs. We aim for them to become successful learners, confident and responsible citizens who are able to live safe, healthy and fulfilling lives.</p> <p>“Design Technology is about turning your design ideas into reality”</p> <p>At Key Stage Three, students cycle through the Carousel of learning across the year and will cover all five subjects by the end.</p>								
Key Stage 2	Year	A	B	C	D	E	Beyond Elton	
<p>Pupils should have knowledge of:</p> <p>Students can build on knowledge and use of electrical systems in products from KS2</p> <p>Most students have not covered technical drawing or CAD in any depth however some may have completed perspective drawings and some 3D sketching in KS1/2. The majority would have used CAD to complete design tasks in the form of software Tinker-CAD</p> <p>Students can build on cross-curricular KS2 style STEAM tasks eg. Modelling &amp; making</p>	7	Technical Drawing (including CAD) Level 1	Food and Nutrition (Healthy Lunchbox)	Design Technology - Timbers	Personal Development: Transition Unit - Looking after you	Drama	<p><b>Key Stage 5</b></p> <p>Engineering related diplomas</p> <p>A level D&amp;T</p> <p>Various T Level Qualifications</p> <p><b>Careers</b></p> <p>Engineering apprenticeships</p> <p>Careers in CAD</p> <p>Draughtsperson careers.</p> <p>BTEC/T levels in Engineering disciplines</p> <p>Degree in Engineering related subjects</p> <p>Careers in Engineering/manufacturing</p>	
	8	Technical Drawing (including CAD) Level 2	Food and Nutrition (Diet and Health)	Design Technology - Multi materials	Textiles Technology	Drama		
	9	Technical Drawing (including CAD) Level 3	Food and Nutrition (Lifestyle and Choice)	Design Technology - Multi materials	Democracy in the UK – Citizenship Unit	Drama		
	10	<p>GCSE Design technology</p> <p>Component 1 theory which leads to exam in Y11.</p> <p>Unit 1: New &amp; emerging technologies; Unit 2: Informing design decisions; Unit 3: Energy, materials, devices &amp; systems; Unit 4: Material types; Unit 5: Designing principles; Unit 6: Timber’s specialism.</p> <p>Component 2 NEA from June in Y10 - A design &amp; make project in the form of a portfolio undertaken in response to one of the contextual challenges set by the exam board.</p>						
	11	<p>Component 2 NEA from June in Y10 - A design &amp; make project in the form of a portfolio undertaken in response to one of the contextual challenges set by the exam board - ongoing until March.</p> <p>Revision and review of knowledge from across the course.</p>						

**Year 7****Overview of the Year**

In year 7, students will experience hands-on practical opportunities to learn about Food Preparation and Nutrition, about Technical Drawing, including CAD, about Design Technology working with timbers and the basics of drama and performance, as well as completing a transition unit in Personal Development.

<b>A: Technical Drawing/CAD 1</b>	<b>B: Food</b>	<b>C: Design Technology - timbers</b>
<p><b>Content:</b>            How to read and follow technical drawings            Colour rendering and tonal shading            Oblique projection            Isometric projections            One-point and two-point perspective            Rendering to illustrate different materials            Introduction to CAD (Sketch-up)              Self/peer - evaluating skills</p>	<p><b>Content:</b>            See Food and Nutrition Curriculum Map</p>	<p><b>Content:</b>            Basic Timber Theory &amp; key words            Sustainability &amp; 6R's            Iterative Design; using sketches &amp; templates            Modelling, testing &amp; development of an idea            Working in mm, using symmetry &amp; dimensioning            Workshop Safety linked to WRL &amp; careers            Using pillar drill and disc sander safely            Cutting, shaping, drilling &amp; finishing timbers</p>
<p><b>Concepts/Generalisations/Skills</b>            Technical drawing skills            CAD skills            Modelling skills            Evaluation Skills</p>	<p><b>Concepts/Generalisations/Skills</b></p> <ul style="list-style-type: none"> <li>•</li> </ul>	<p><b>Concepts/Generalisations/Skills</b>            Research skills            Iterative Designing skills            Modelling skills            Making skills            Evaluation Skills</p>
<p><b>Assessment</b>            End of Unit Test</p>	<p><b>Assessment</b></p>	<p><b>Assessment</b>            End of Unit Test</p>
<p><b>Revisit/Review</b>            Perspective taught at Key Stage Two              CAD software using within KS2 (tinker-CAD)</p>	<p><b>Revisit/Review</b></p> <ul style="list-style-type: none"> <li>•</li> </ul>	<p><b>Revisit/Review</b>            Students can build on cross-curricular KS2 style STEAM tasks e.g. Modelling &amp; making a Viking Shield.</p>

**Year 7**

<b>D: Personal Development</b>	<b>E: Drama</b>	
<b>Content:</b> Managing Change Health protection, the body and development Friendship, respect and relationships Staying safe online and offline Celebrating difference Politics, Parliament and me	<b>Content:</b> Introduction to drama as a subject and how it links to the Oracy curriculum. Building on confidence through role play and learning about Key aspects of theatre layout.	
<b>Concepts/Generalisations/Skills</b> <ul style="list-style-type: none"><li>• The key skills explored here are found in the overview of the Personal Development Curriculum</li></ul>	<b>Concepts/Generalisations/Skills</b> <ul style="list-style-type: none"><li>• Stage Layout</li><li>• Improvisation</li><li>• Learning to be silly through play</li></ul>	
<b>Assessment</b> <ul style="list-style-type: none"><li>• Knowledge quiz</li></ul>	<b>Assessment</b> <ul style="list-style-type: none"><li>• Knowledge Quiz completed on key concepts</li></ul>	
<b>Revisit/Review</b> <ul style="list-style-type: none"><li>• Personal Development learning from KS2 is revisited in these sessions.</li></ul>	<b>Revisit/Review</b> <ul style="list-style-type: none"><li>• Revisiting KS2 performance experiences and making links to the Oracy curriculum</li></ul>	

**Year 8****Overview of the Year**

In year 8, students will experience hands-on practical opportunities to learn about Food Preparation and Nutrition, about Technical Drawing, including CAD 2, about Design Technology working with multi materials and textiles and drama and performance 2.

<b>A: Technical Drawing/CAD 2</b>	<b>B: Food</b>	<b>C: Design Technology – multi materials</b>
<p><b>Content:</b>            How to read and follow technical drawings            Colour rendering and tonal shading            Oblique projection            Isometric projections            One-point and two-point perspective            Rendering to illustrate different materials            Orthographic projection            Exploded diagrams            Developing CAD skills            Self/peer - evaluating skills</p>	<p><b>Content:</b>            See Food and Nutrition Curriculum Map</p>	<p><b>Content:</b>            Basic Materials Theory &amp; using associated Technical Language- Pine, Metals and Acrylic.            Metal stock forms &amp; science- ferrous metals / non-ferrous metals            Batch Manufacturing- using jigs, formers and templates.            Following Design Drawings and working to ‘tolerance’.            Joining materials – permanent and temporary methods. (Dowel joint, screws, adhesives)            Workshop Safety            Using Pillar Drill and Disc Sander safely            Cutting, Shaping, Drilling &amp; Finishing Pine, sheet brass, steel rod and galvanised mesh.            Evaluative Importance of good self/peer assessment</p>
<p><b>Concepts/Generalisations/Skills</b>            Technical drawing skills            CAD skills            Modelling skills            Evaluation Skills</p>	<p><b>Concepts/Generalisations/Skills</b></p>	<p><b>Concepts/Generalisations/Skills</b>            Research skills            Modelling skills            Making skills            Evaluation Skills</p>
<p><b>Assessment</b>            End of Unit Test</p>	<p><b>Assessment</b></p>	<p><b>Assessment</b>            End of Unit Test</p>
<p><b>Revisit/Review</b>            Material rendering, Oblique projection, isometric projection, one – point perspective and two-point perspective drawings. CAD skill revisited.</p>	<p><b>Revisit/Review</b></p>	<p><b>Revisit/Review</b>            Revisit from Y7. Q&amp;A recall types of timber and their features- make relevant links to current tasks e.g. direction of grain. Build on/reinforce prior knowledge e.g. materials, tools, equipment used in other modules of work.</p>

**Year 8**

<b>D: Design Technology textiles</b>	<b>E: Drama</b>	
<b>Content:</b> Workshop & art room safety rules Basic Materials Theory & using associated Technical Language- natural & synthetic fibres Artist research – design era/designer influences Iterative designing ideas & importance of templates/patterns Using equipment safely Different stitching techniques Cutting, sewing and fabric finishing techniques Evaluative importance of good self/peer assessment	<b>Content</b> Developing devised skills and building confidence in performance. Students have completed their Oracy Speeches in Y7 and now need to develop their performance skills.	
<b>Concepts/Generalisations/Skills</b> Research skills Iterative designing skills Modelling skills Making skills Evaluation Skills	<b>Concepts/Generalisations/Skills</b> Confidence  Resilience  Devising  Performance	
<b>Assessment</b> End of Unit Test	<b>Assessment</b> Knowledge Quiz completed on key concepts	
<b>Revisit/Review</b> Revisit from Y7. Q&A recall types of fabric to include natural & synthetic. The raw materials that synthetic fibres come from and how natural fibres occur.	<b>Revisit/Review</b> Links to Oracy curriculum from Y7	

**Year 9****Overview of the Year**

In year 9, students will experience hands-on practical opportunities to learn about Food Preparation and Nutrition, about Technical Drawing, including CAD 3, about Design Technology working with multi materials, drama and performance 3 and DOE.

<b>A: Technical Drawing/CAD 3</b>	<b>B: Food</b>	<b>C: Design Technology – multi materials</b>
<p><b>Content:</b>            How to read and follow technical drawings            Colour rendering and tonal shading            Oblique projection            Isometric projections            One-point and two-point perspective            Rendering to illustrate different materials            Orthographic projection            Exploded diagrams with parts diagram              Developing CAD skills further in preparation for GCSE              Self/peer - evaluating skills</p>	<p><b>Content:</b>            See Food and Nutrition Curriculum Map</p>	<p><b>Content:</b>            Identifying a need and consider Inclusive Design. Consider ergonomics using anthropometrics.            Product analysis and primary research – find &amp; use sizes to inform design planning and modelling.            Iterative design, sketching, modelling, working out parts and sizes in mm. (address common misconceptions with cm)            Avoid ‘the rectangle’            Working drawings and cutting lists- focus on communication accuracy.            Plywood / manufactured timber- properties, advantages, disadvantages.            Joining plywood – permanent and temporary methods, inc. strengthening/supporting (Dowel joint, cross halving)            Workshop Safety            Using Pillar Drill and Disc Sander safely            Cutting, Shaping, creating angles, drilling &amp; Finishing plywood.</p>
<p><b>Concepts/Generalisations/Skill</b>            Technical drawing skills            CAD skills            Modelling skills            Evaluation Skills</p>	<p><b>Concepts/Generalisations/Skills</b></p>	<p><b>Concepts/Generalisations/Skills</b>            Research skills            Iterative designing skills            Modelling skills            Making skills            Evaluation Skills</p>
<p><b>Assessment</b>            End of Unit Test</p>	<p><b>Assessment</b></p>	<p><b>Assessment</b>            End of Unit Test</p>
<p><b>Revisit/Review</b>            Material rendering, Oblique projection, isometric projection, one – point perspective and two-point perspective drawings, Orthographic projection &amp; exploded diagrams. CAD skill revisited.</p>	<p><b>Revisit/Review</b></p>	<p><b>Revisit/Review</b>            Revisit from Y7/8. Q&amp;A recall types of timbers and their features- make relevant links to current tasks e.g. direction of grain. Build on/reinforce prior knowledge e.g. materials, tools, equipment used in other modules of work covered throughout KS3.</p>

Year 9		
D: Drama	E: Democracy in the UK	
<p><b>Content</b> Looking at further developing the drama skills learnt in previous years. Continuing to build on devised and performance skills and spending more time on character development</p>	<p><b>Content:</b> How Government is constructed in Britain, how Parliament works, the role of an MP, how elections work, how the devolved nations are governed differently, why votes at 16 are under consideration.</p>	
<p><b>Concepts/Generalisations/Skills</b></p> <ul style="list-style-type: none"> <li>- Interview styles/techniques</li> <li>- Character development</li> <li>- Devised skills</li> <li>- Murder Mystery components</li> </ul>	<p><b>Concepts/Generalisations/Skills</b></p> <p>The government is composed of a legislature and an executive branch</p> <p>The House of Lords and House of Commons have different roles</p> <p>Elections impact the composition of Parliament</p> <p>MPs are elected by a constituency</p> <p>Elections and the role of government differ across the nations of the UK</p>	
<p><b>Assessment</b> Knowledge Quiz completed on key concepts</p>	<p><b>Assessment</b> End of unit knowledge quiz</p>	
<p><b>Revisit/Review</b></p> <p>Key concepts and vocabulary related to performance from the Y8 curriculum</p>	<p><b>Revisit/Review</b></p> <p>Reference to British Values, which are covered across the curriculum and key stage,</p>	

## Year 10

### Overview of the Year

Y10 Component 1 theory which leads to exam in Y11.

Unit 1: New & emerging technologies; Unit 2: Informing design decisions; Unit 3: Energy, materials, devices & systems; Unit 4: Material types; Unit 5: Designing principles; Unit 6: Timber's specialism.

Y10 Focussed design & make tasks: Nesting box, trinket box, carriage clock, pewter key ring, technical drawing including CAD skills.

Y10 Component 2: NEA ongoing from June until March in Y11.

Autumn 1	Autumn 2	Spring 1
<p><b>Content:</b>  <b>Unit 1: New &amp; emerging technologies.</b>            Explain the impact of new and emerging technologies on tools and equipment, explain how robotics have affected the workplace            State what is meant by privately-owned and not-for-profit organisations            Understand how new technology has affected children and people with disabilities            Explain how the Internet of Things (IoT), remote working and the use of video conferencing has developed            Understand how products are produced in different volumes</p> <p><b>Unit 2: Informing design decisions</b>            Critically evaluate an existing product using given criteria            Understand how budget and timescale affect's manufacture            Give examples of where new and emerging technologies have been used in disaster recovery, medicine, travel, effect on global warming and communications            Know how global warming is caused and how it can be slowed            Explain the effects of global warming on the world's climate            Give examples of how new and emerging technology is used for communication purposes            Consider the working conditions of employees in the production of new materials and explain the term 'carbon footprint' and the use of a Lifecycle Assessment</p> <p><b>Focussed task Project 1: Nesting box/CAD work</b></p>	<p><b>Content:</b>  <b>Unit 3: Energy, materials, devices &amp; systems.</b>            Explain how power is generated from fossil fuels including oil, gas and coal and how renewable energy is generated from a variety of sources            Explain the use of batteries to power portable systems            Justify how renewable energy can be stored and used to balance demand at peak times            Name and define a range of modern, smart and composite materials, identify the properties for a range of technical textiles and recognise and describe a range of input and output components, physically and symbolically            Understand that all systems comprise of one or more inputs, processes and outputs, recognise different types of mechanical movement and state examples of first, second and third order levers            Understand how linkages change the direction of movement, recognise different types of cams and followers and demonstrate an understanding of how microcontrollers are programmed to control processes in simple systems</p> <p><b>Focussed task Project 2: trinket box/CAD work</b></p>	<p><b>Content:</b>  <b>Unit 4: Material types</b>            Name and identify all the primary sources of raw materials for producing specific materials in each of the five categories            Recognise and differentiate a wide range of different materials from each of the five material areas            Categorise and name most of the specific materials into their appropriate areas            Understand and explain why the physical structure of the main categories for each material area, separates them from the others            Be able to identify and explain the working properties of most materials and how this affects their performance in use, considering both positive and negative factors</p> <p><b>Focussed task Project 3: technical drawing skills including CAD</b></p>
<p><b>Concepts/Generalisations/Skills</b>            Theoretical knowledge            Research and iterative designing skills            Modelling and making skills            Evaluation Skills            Further developing CAD skills.</p>	<p><b>Concepts/Generalisations/Skills</b>            Theoretical knowledge            Research and iterative designing skills            Modelling and making skills            Evaluation Skills            Further developing CAD skills.</p>	<p><b>Concepts/Generalisations/Skills</b>            Theoretical knowledge            Research and iterative designing skills            Modelling and making skills            Evaluation Skills            Further developing CAD skills.</p>
<p><b>Assessment</b>            End of unit tests – unit 1 &amp; 2 and practical assessment – nesting box/CAD work</p>	<p><b>Assessment</b>            End of unit test – unit 3 and practical assessment – trinket box/CAD work</p>	<p><b>Assessment</b>            End of unit test – unit 4 and pPractical assessment – technical drawing skills &amp; CAD.</p>
<p><b>Revisit/Review</b>            Revisit from all KS3. Q&amp;A. Do now/review now tasks. recall types of ethical and environmental issues.</p>	<p><b>Revisit/Review</b>            Revisit from all KS3 &amp; previous term.. Electrical/mechanical science links to physics.</p>	<p><b>Revisit/Review</b>            Revisit from all KS3 &amp; previous terms. Electrical/mechanical science links to physics.</p>

Year 10		
Spring 2	Summer 1	Summer 2
<p><b>Content:</b> <b>Unit 5: Designing principles</b></p> <p>Appreciate the diverse needs and values of different social, ethnic and economic groups</p> <p>Describe how products can be designed and analysed to reduce environmental impact</p> <p>Know how to investigate, analyse and evaluate a given product and the work of others</p> <p>Understand how investigating the work of other designers and companies can inform design</p> <p>Explain design fixation and how to avoid it</p> <p>Be able to use a range of design strategies to help produce imaginative and creative design ideas</p> <p>Explain how to develop, communicate, record and justify design ideas</p> <p>Explain how products are developed according to the capabilities of humans and machines</p> <p>Be aware of a range of techniques to support clear communication and presentation of design ideas</p> <p><b>Focussed task Project 4: Carriage clock (laser cutting) including CAD</b></p>	<p><b>Content:</b> <b>Unit 6: Timbers specialism</b></p> <p>Recognise common faults in natural timber and explain how common faults in timber can be reduced or avoided</p> <p>Explain sustainability and ethical factors in timber production and in use and understand the roll of FSC and PEFC organisations</p> <p>Name the common commercial stock forms, types and sizes of timber-based materials and identify different types of knock-down fittings</p> <p>Describe school-based cutting, forming and processing techniques</p> <p>Explain how timbers and boards are selected and processed for commercial products</p> <p>Identify techniques to prepare and apply of treatments and finishes</p> <p>Explain why manufactured board is suitable for flat pack furniture</p> <p>Describe the processes of conversion and seasoning, the consequences of illegal logging and the production and use of veneer.</p> <p>Identify and explain the comparative advantages of different wood joints and explain the advantages and disadvantages of manufactured board compared with natural wood and calculate quantities of timber and board</p> <p><b>Focussed task Project 5: Pewter casting (laser cutting) including CAD &amp; line bending focussed task.</b></p>	<p><b>Content:</b> <b>Component 2 NEA from June in Y10 - A design &amp; make project in the form of a portfolio undertaken in response to one of the contextual challenges set by the exam board.</b></p> <p><b>NEA 1.1 investigation</b></p> <ul style="list-style-type: none"> <li>• Mind map of context</li> <li>• Written analysis</li> <li>• Target market/questionnaire investigation.</li> <li>• Similar products investigation</li> <li>• Ergonomics/anthropometrics investigation</li> <li>• Safety laws investigation</li> <li>• Material's investigation</li> <li>• Surface finish investigation</li> <li>• Joining method investigation</li> <li>• Investigations into design influences</li> <li>• Analysis in detail of all 1.1 content</li> </ul> <p><b>NEA 1.2 Design brief and design specification</b></p> <ul style="list-style-type: none"> <li>• Formulation of design brief</li> <li>• Create design specification linked to completed investigations in 1.1.</li> </ul>
<p><b>Concepts/Generalisations/Skills</b></p> <p>Theoretical knowledge</p> <p>Research and iterative designing skills</p> <p>Modelling and making skills</p> <p>Making and evaluation Skills</p> <p>Further developing CAD &amp; CAD/CAM skills</p>	<p><b>Concepts/Generalisations/Skills</b></p> <p>Theoretical knowledge</p> <p>Research and iterative designing skills</p> <p>Modelling and making skills</p> <p>Making and evaluation Skills</p> <p>Further developing CAD &amp; CAD/CAM skills</p>	<p><b>Concepts/Generalisations/Skills</b></p> <p>Theoretical knowledge</p> <p>Research and iterative designing skills</p> <p>Modelling and making skills</p> <p>Making and evaluation Skills</p> <p>Further developing CAD &amp; CAD/CAM skills</p>
<p><b>Assessment</b></p> <p>End of unit test – unit 5</p> <p>Practical assessment – Carriage clock/CAD work</p>	<p><b>Assessment</b></p> <p>End of unit test – unit 6 – and practical assessment – Carriage clock/CAD work, pewter casting/line bending activity and End of Year 10 mock exam – past paper to cover all theory (units 1-6)</p>	<p><b>Assessment</b></p> <p>GCSE assessment according to Edexcel Pearson exemplars guidance for the NEA.</p>
<p><b>Revisit/Review</b></p> <p>Revisit from all KS3 &amp; previous terms work. Q&amp;A recall – do now/review now tasks. Also links in the making tasks to all timber theory knowledge including use of tools &amp; equipment.</p>	<p><b>Revisit/Review</b></p> <p>Revisit from all KS3 &amp; previous terms work. Q&amp;A recall – do now/review now tasks. Also links in the making tasks to all timber theory knowledge including use of tools &amp; equipment.</p>	<p><b>Revisit/Review</b></p> <p>Iterative design process analysis/recaps throughout the NEA.</p> <p>Revisit from all KS3 &amp; previous terms work. Q&amp;A recall.</p>

**Year 11**

**Overview of the Year**

**Component 2 NEA from June in Y10 - A design & make project in the form of a portfolio undertaken in response to one of the contextual challenges set by the exam board - ongoing until March.**

**Revisit Component 1 theory (units 1-6) complete revision for final written exam (March - June)**

Autumn 1	Autumn 2	Spring 1
<p><b>Content:</b>  <b>Component 2 NEA from June in Y10 - A design &amp; make project in the form of a portfolio undertaken in response to one of the contextual challenges set by the exam board.</b>  <b>NEA 2.1 Design ideas</b>            Create wide range of innovative design ideas            Iterative design completed through CAD/card modelling            Annotate design ideas with clear links to investigation (1.1) &amp; design specification (1.2)            Seek end user opinions</p> <p><b>NEA 2.2 Review of design ideas</b>            Critical evaluate each idea against design specification (1.2)            Identify design idea strengths &amp; weaknesses            Use scoring system to select chosen idea or even combine ideas to follow the iterative process.            Seek and record end user opinions</p>	<p><b>Content:</b>  <b>Component 2. A design &amp; make project in the form of a portfolio undertaken in response to one of the contextual challenges set by the exam board.</b>  <b>NEA 2.3 Development of chosen idea</b>            Developing iteratively the chosen idea through modelling and CAD            Iteratively test combine materials, finished &amp; joining methods that can be used and seek and record end user opinions            Produce manufacturing specification and final working drawings. Plan for prototype manufacture including cuttings list  <b>NEA 2.5 Review of chosen idea</b>            Review final design against the problem in the set context and against the design criteria  <b>3.1 (a) Selection of materials</b>            Provide evidence of selection of appropriate materials for the prototype and give reasons for choice  <b>3.1 (b) Manufacture – skills &amp; processes</b>  <b>3.2 Quality &amp; accuracy</b>            Manufacture the prototype, including photographic making log to show stages of manufacture. Attention to detail given to prototype accuracy, quality and surface finish</p>	<p><b>Content:</b>  <b>Component 2. A design &amp; make project in the form of a portfolio undertaken in response to one of the contextual challenges set by the exam board.</b>  <b>3.1 (b) Manufacture – skills &amp; processes</b>  <b>3.2 Quality &amp; accuracy</b>            The prototype is then manufacture using multi- materials if appropriate            Include photographic making log to show stages of manufacture this demonstrates &amp; provides evidence for the assessment of skills/processes            Attention to detail given to prototype accuracy            Attention to detail to prototype quality/surface finish            Is the prototype fit for purpose &amp; commercially viable  <b>4.1 Testing &amp; evaluation</b>            Evaluate product against design specification (1.2)            Seek and record end user views            Complete LCA of final product            Include photographs of final product</p>
<p><b>Concepts/Generalisations/Skills</b>            Research skills            Iterative designing skills            Modelling skills            Making skills            Evaluation Skills            Further developing CAD &amp; CAD/CAM skills</p>	<p><b>Concepts/Generalisations/Skills</b>            Research skills            Iterative designing skills            Modelling skills            Making skills            Evaluation Skills            Further developing CAD &amp; CAD/CAM skills</p>	<p><b>Concepts/Generalisations/Skills</b>            Research skills            Iterative designing skills            Modelling skills            Making skills            Evaluation Skills            Further developing CAD &amp; CAD/CAM skills</p>
<p><b>Assessment</b>            GCSE NEA assessment according to Edexcel Pearson exemplars guidance for the NEA.</p>	<p><b>Assessment</b>            GCSE NEA assessment according to Edexcel Pearson exemplars guidance for the NEA.</p>	<p><b>Assessment</b>            Assessment of GCSE mock exam – use Edexcel Pearson grade boundaries</p>
<p><b>Revisit/Review</b>            Iterative design process analysis/recaps throughout the NEA. Revisit from all KS3 &amp; previous terms work.</p>	<p><b>Revisit/Review</b>            Iterative design process analysis/recaps throughout the NEA. Revisit from all KS3 &amp; previous terms work.</p>	<p><b>Revisit/Review</b>            Iterative design process analysis/recaps throughout the NEA. Revisit from all KS3 &amp; previous terms work.</p>

Year 11		
Spring 2	Summer 1	Summer 2
<p><b>Content:</b>  <b>Component 2. A design &amp; make project in the form of a portfolio undertaken in response to one of the contextual challenges set by the exam board.</b></p> <p><b>4.1 Testing &amp; evaluation - continued</b></p> <ul style="list-style-type: none"> <li>· Evaluate product against design specification (1.2)</li> <li>· Seek and record end user views</li> <li>· Complete LCA of final product</li> <li>· Include photographs of final product</li> </ul> <p><b>NEA completed by mid-March.</b></p>	<p><b>Content:</b>  <b>Revisit Component 1 theory (units 1-6) complete revision for final written exam (March - June)</b></p> <p>Recap on <b>Component 1</b> theory which leads to exam in Y11.</p> <ul style="list-style-type: none"> <li>· Unit 1: New &amp; emerging technologies</li> <li>· Unit 2: Informing design decisions</li> <li>· Unit 3: Energy, materials, devices &amp; systems Unit 4: Material types</li> <li>· Unit 5: Designing principles</li> <li>· Unit 6: Timber's specialism.</li> </ul>	<p><b>Content:</b>  <b>Revisit Component 1 theory (units 1-6) complete revision for final written exam (March - June)</b></p> <p>Recap on <b>Component 1</b> theory which leads to exam in Y11.</p> <ul style="list-style-type: none"> <li>· Unit 1: New &amp; emerging technologies</li> <li>· Unit 2: Informing design decisions</li> <li>· Unit 3: Energy, materials, devices &amp; systems Unit 4: Material types</li> <li>· Unit 5: Designing principles</li> <li>· Unit 6: Timber's specialism.</li> </ul> <p><b>Final written exam - JUNE</b></p>
<p><b>Concepts/Generalisations/Skills</b>  Theoretical knowledge  Research skills  Iterative designing skills  Modelling skills  Making skills  Evaluation Skills  Further developing CAD &amp; CAD/CAM skills</p>	<p><b>Concepts/Generalisations/Skills</b>  Theoretical knowledge  Research skills</p>	<p><b>Concepts/Generalisations/Skills</b>  Theoretical knowledge  Research skills</p>
<p><b>Assessment</b>  GCSE NEA assessment according to Edexcel Pearson exemplars guidance for the NEA.</p>	<p><b>Assessment</b>  Assessment of revision cards (Units 1-6)   Assessment of past paper questions</p>	<p><b>Assessment</b>  Assessment of revision cards (Units 1-6)   Assessment of past paper questions</p>
<p><b>Revisit/Review</b>  Iterative design process analysis/recaps throughout the NEA.</p> <p>Revisit from all KS3 &amp; previous terms work. Q&amp;A recall – do now/review now tasks. Also links in the making tasks to all timber theory knowledge including use of tools &amp; equipment. Revisiting technical drawing/CAD skills and content taught throughout KS3/4. Revision cards/Knowledge organisers distributed.</p>	<p><b>Revisit/Review</b>  Iterative design process analysis/recaps throughout the NEA.</p> <p>Revisit from all KS3 &amp; previous terms work. Q&amp;A recall – do now/review now tasks. Also links in the making tasks to all timber theory knowledge including use of tools &amp; equipment. Revisiting technical drawing/CAD skills and content taught throughout KS3/4. Revision cards/Knowledge organisers distributed.</p>	<p><b>Revisit/Review</b>  Iterative design process analysis/recaps throughout the NEA.</p> <p>Revisit from all KS3 &amp; previous terms work. Q&amp;A recall – do now/review now tasks. Also links in the making tasks to all timber theory knowledge including use of tools &amp; equipment. Revisiting technical drawing/CAD skills and content taught throughout KS3/4. Revision cards/Knowledge organisers distributed.</p>

