

Timeline	Topic	Key concepts and knowledge	Skills development	Rationale
11 - half term 1	<p>NEA Exam board set task.</p> <p>Students working independently on their own project. Through the various stages</p> <p>Revision of skills and knowledge and application of these into exam board set task</p>	<p>Identifying problem/user needs Design brief Specification, Primary and secondary research Exploring and generating design ideas 2D and 3D drawing Initial modelling/prototyping to test ideas Evaluation of models Revision of theory taught in yr7-10 during NEA to prep for final exam</p>	<p>Using a range of design strategies Use a range of drawing techniques (e.g. freehand sketching, 2 point perspective, rendering) Investigation and research Evaluation of ideas Creativity avoiding fixation Problem solving and experimentation Digital skills and communication techniques Self-management: organisation & meeting deadlines Resilience</p>	<p>NEA is worth 50% of the overall qualification grade. Each year the exam board set the task and students need to respond by identifying their own problem, user and design brief from the given context. Students work at their own pace and manage their own time while following the iterative design cycle.</p> <p>Term one is focused on completing the initial research into the design context and starting to draw and model initial design ideas as part the iterative design cycle. There will be overlap between the sections on the SOW/intent as the students work at their own pace through the design cycle.</p>

<p>11 - half term 2</p>	<p>NEA Exam board set task.</p> <p>Students working independently on their own project. Through the various stages</p> <p>Revision of skills and knowledge and application of these into exam board set task</p>	<p>Developing design ideas, refining ideas Meeting needs and want of client by testing Evaluation of ideas against design specification Realising design ideas Manufacturing planning Modelling in 2D and 3D Selection of materials and components Testing methods How to plan manufacture and provide sufficient detail CAD/CAM Tolerance</p>	<p>Development of ideas 2D and 3D techniques CAD/CAM Modelling ideas Testing ideas Manufacturing planning Creativity Problem solving Digital skills Self management: organisation & meeting deadlines Resilience</p>	<p>NEA is worth 50% of the overall qualification grade. Each year the exam board set the task and students need to respond by identifying their own problem, user and design brief from the given context. Students work at their own pace and manage their own time while following the iterative design cycle.</p> <p>Term one is focused on completing the initial research into the design context and starting to draw and model initial design ideas as part the iterative design cycle. There will be overlap between the sections on the SOW/intent as the students work at their own pace through the design cycle.</p>
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<p>11 – half term 3</p>	<p>NEA Exam board set task.</p> <p>Students working independently on their own project. Through the various stages</p> <p>Revision of skills and knowledge and application of these into exam board set task</p>	<p>Realising design ideas Analysing and evaluating Working with a range of materials, components and processes Tolerances Specialist tools and equipment Surface treatment Quality of finish CAD/CAM (where appropriate) Testing methods Comparison against brief and specification Recommend modifications based on testing Revision techniques and applying knowledge to exam questions and NEA task</p>	<p>Working with materials and specialist equipment safely and to high standard Following manufacturing plans. Critical analysis and problem solving Identify improvements Creativity Digital skills Fabrication and assembly using a variety of techniques e.g. wastage, addition, deforming, reforming Materials management e.g. datum's Working with accuracy, tolerance Surface finishes Market testing Safe working practices in the workshop</p>	<p>NEA is worth 50% of the overall qualification grade. Each year the exam board set the task and students need to respond by identifying their own problem, user and design brief from the given context. Students work at their own pace and manage their own time while following the iterative design cycle.</p> <p>Term two is focused on creating a prototype of the final design selecting and using a range of techniques and materials. The final prototype will be evaluated and tested to see if user needs have been met.</p> <p>There will be overlap between the sections on the SOW/intent as the students work at their own pace through the design cycle, they may need to revisit some earlier sections as the design evolves.</p>
<p>11 – half term 4</p>	<p>Exam revision and practice</p> <p>Revision skills</p> <p>Exam technique</p>	<p>Focused specific revision based on students prior learning and progress.</p> <p>Revision all subject content over the final term</p>	<p>Exam techniques Model answers and structure Technical vocabulary Literacy and QWC Subject specific vocabulary Extended and short answer techniques Self management: revision, resilience</p>	<p>Student have now applied their skills and knowledge to a set NEA task. The remaining time this term is taken assisting student to apply their knowledge to a different context – exam questions. Student will actively revise in lessons and practice past questions to prepare them for the exam worth 50% of the qualification.</p>

<p>11 – half term 5</p>	<p>Exam revision and practice Revision skills Exam technique</p>	<p>Focused specific revision based on students prior learning and progress. Revision all subject content over the final term</p>	<p>Exam techniques Model answers and structure Technical vocabulary Literacy and QWC Subject specific vocabulary Extended and short answer techniques Self management: revision, resilience</p>	<p>Student have now applied their skills and knowledge to a set NEA task. The remaining time this term is taken assisting student to apply their knowledge to a different context – exam questions. Student will actively revise in lessons and practice past questions to prepare them for the exam worth 50% of the qualification.</p>