Intent		What new knowledge/content do we introduce?			
By the end of KS4 students are able to…		**Year 10**	**Year 11**	**Choices**	**How does this curriculum incorporate the National Curriculum and go beyond? How does going beyond the NC ensure challenge?**
Be equipped with the skills to enjoy, produce, and engage with Design throughout their lives, **Develop transferable skills.** ● Non-routine problem solving ● Decision-making and reasoning. ● Critical thinking ● ICT literacy ● Communication ● Relationship-building skills ● Collaborative problem solving ● Adaptability ● Self-management and self-development **Development and application of technical knowledge and skills:** • Observational drawing using a wide range of media. • Generation of iterative ideas • Avoiding product fixation •	**Autumn**	Introduction to 3D design (AO1/AO2) Focus: design drawing skills and core principles of visual communication in design. Design presentation, layouts, and composition. Developing CAD skills using 2D design and introduction to new applications (Sketchup, tinkercad)	Coursework: Resolving a project and presenting final outcomes (AO4) Focus: Combining formal elements and design principles. Selecting research and ideas purposefully. Refining designs and skills for effect. Expressing intentions. Planning and making outcomes	We have selected artists for the teacher led phase to introduce students to a wide selection of artists and designers. To enable students to make studies using a wide range of methods and materials. and develop their own personal responses and communicate ideas. To build on foundational skills developed throughout KS3 in the following areas: • Observational drawing • Choice and collection of primary resources • Analysis of designers and design movements • Development of individual ideas through research • Understanding and application of the formal elements and principles of design • Model making skills using a wide range of materials. • CADCAM skills and techniques	We have built a strong progression through year 10 and 11 to support personalisation of work and independent project pathways. We do not expect all our students to complete the same work. Projects start with teacher led activities to introduce students to new artists, concepts, and ways of working. At this phase students are encouraged to make choices about activities and use of materials and to respond to source inspiration with developing message and meaning ideas. Students then have a solid foundation of inspiration to draw from to enable them to develop their own route
		Coursework (portfolio): Initial ideas and research (AO1/AO2/AO3) Focus: Research methods and presentation. Application of 2D media, planning a response to an abstract, this may include developing a design brief or design enquiry. Designer analysis, visual and technical investigations	**Coursework deadline: Completion of outcomes and final presentation of portfolio (AO1/AO2/AO3/AO4)** Focus: Presenting outcomes, presenting a cohesive learning journey/portfolio effectively. Ensuring clarity and coherence.		
	Spring	Coursework: Responding to initial inspirations (AO1/AO2/AO3) Focus: Identification of product focus, modes of product research, key terms using design language, developing critical analysis techniques. Modelling and prototyping theory and techniques	Externally set assignment (ESA) (AO1/AO2/AO3/AO4) Focus: Paper released in January. Exploring given themes/big ideas. Initial research in response to context, exploring themes, responding to sources. Developing ideas, reflecting on progress, and resolving project intentions		
		Coursework: Experimenting, developments and reflections (AO2/AO3) Focus: Practical skills development. Working with CAD and hand building techniques. Working with plywood, acrylic, polypropylene, cards, papers, clay and found materials. Cutting, shaping, forming, and finishing	**ESA** **focus: Independent development of response to a chosen theme, evidencing all assessment objectives (AO's). 10-hour practical exam at end of April. *Date subject to change.***		
	Summer	Coursework: Presenting and refinement of ideas in context to another's work, a design movement or big idea. Developing a brief and specification. (AO1/AO2/AO3) Focus: Application of prior knowledge including research skills, visual communication, design development, refinement, and choice of materials to suit individual needs			
		Coursework: Recording ideas, refinements, evaluating and reflection (AO1/AO2/AO3) Focus: Student design and product refinement. Construction of final prototype, samples, and design ideas			

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Model making in a variety of materials: plywood, acrylic, cardboard, paper, wire etc.
Utilising CAD/CAM technology: 2D design (laser cutting), SketchUp (visualisation), tinkercad (on-screen model making)

Meet assessment criteria as set by the exam board:

AO1
Develop ideas through investigations, demonstrating critical understanding of sources.
AO2
Refine work by exploring ideas, selecting, and experimenting with appropriate media, materials, techniques, and processes.
AO3
Record ideas, observations, and insights relevant to intentions and work progresses.
AO4
Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.
</td>
<td>Rationale for this sequence</td>
<td>Learning progressively builds students understanding and application of the Formal Elements within the core concepts of 3D Design (Designing, Making, Evaluating and Technical knowledge).so that students may engage and implement them purposefully, working towards the production of a functional and aesthetically pleasing outcomes, which is fully justified.

Students explore the rich history of design through the ages, drawing comparisons between historical and contemporary design. Students will be invited to explore design and its many facets through classroom and blended learning experiences.

Students will be able to produce in-depth critical analysis of their own and others work, which inform students next steps in the development of their ideas leading to a refined product. Students will be able to simulate and adapt researched contextual studies within their own work, identifying areas they may wish to develop further or incorporate into their own design journey.

Students will learn through expert modelling. Students will have opportunities to practice and refine the core skills of Design in isolation, before progressing on to more independent applications and the creation of independent design ideas. Through frequent retrieval and recapping of knowledge and understanding will be imbedded and built on students understanding of Designs core principals and Design in a wider context.</td>
<td>Substantive Knowledge: Students will draw on their knowledge and understanding of Designing, Making, Evaluating and Technical processes to produce refined outcomes.

Evaluating and Technical processes to produce refined outcomes. Disciplinary/procedural Knowledge: Applying material and processes which are best suited to their individual design journeys and development/ refinement of final outcomes to produce an aesthetically pleasing and functional piece.

Mastery: students will be able to produce in-depth critical analysis of their own and others work, which inform students next steps in the development of their design ideas. Students will be able to simulate and adapt researched contextual studies within their own work, identifying areas they may wish to develop further or incorporate into their own design journey. Students will be able to develop sophisticated ideas, manipulating appropriate materials and media with skill to refine ideas developing products that consider form and function in equal parts. Work will be reflected on and evaluated purposively throughout each development stage, leading to an outcome which demonstrates a high level of creativity, media, and material control.

Students will continue to explore how the products we use are influenced by the world around them and how/why over time products have evolved.
Students are expected to demonstrate respect, integrity and responsibility for their actions when working in Product Design practical and theoretical lessons. Students will be supported in building on their level of confidence within Product Design so that all can engage with enthusiasm, resilience and strive for continual improvement</td>
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Understanding of context and development of message and meaning

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<td rowspan="2">through sustained investigation and to a personal response.

Teachers support this development through building close professional working relationships with students through regular one to one support and discussion, coaching students to take control.</td>
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<td>How does the KS4 Curriculum build on previous learning at KS3?</td>
<td colspan="3">Students will build on their KS3 understanding of the design process, Design, Make, Evaluate and Technical Knowledge. Students will study the art of visual communication, the role of form and function, the work of other and technical processes in a variety of material areas.</td>
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