Curriculum Map - DT

KS3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	Project 1: Ugly Doll		Project 2: Kitchen Safety		Project 2: CAD/CAM Desk Tidy	

KS3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 8	Project 1: Comic Game		Project 2: Upcycled Crafts		Project 3: Italian Cuisine	

KS3	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 9	Project 1:Fakeaways		Project 2: Mechanisms		Project 3: 3D Sculpture	

KS4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 10	Project 1: Fantastic Folk Law		Project 2: Creative Creatures		Project 3: CAD/CAM Lighting	

KS4	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1
Year 11	Project 4: Student Focused ESA		ESA Externally Set Assignment		Portfolio presentation

KS5	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 12	Skill Building Workshop: Poison Bottle & Ornate Shoe		Developing: Fantastic & Strange		Personal Investigation	

KS5	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1
Year 13	Personal Investigation		ESA Externally Set Assignment		Portfolio presentation

Curriculum Overview - DT

KS3

At KS3 our students will develop their knowledge and understanding of the design and make process, with a focus on key design elements and exploring the importance of presenting their ideas with passion and pride.

Areas studied:
Year 7: Health and safety of the workshop, exploring graphic communication techniques, cutting and sewing processes to create a bespoke ugly doll, manufacturing working prototypes that are then evaluated before making their own bespoke desk tidy.
Year 8: 3D forms – experimenting with compliant modelling materials such a foamboard and Styrofoam, understanding how ergonomics and anthropometrics can influence the design of products. Students will select from and use specialist tools, techniques, processes, equipment and machinery precisely, including computer aided design and manufacture to create bespoke and authentic outcomes.
Year 9: CAD/CAM versus the use of hand-crafted traditional techniques, designing for a particular client, exploring a range of materials and processes and enhancing graphic communication techniques. Students will be encouraged to develop and communicate design ideas using annotated sketches, detailed plans and 3D modelling when planning their 3D sculpture. Students will then select from a wider and more complex range of materials and use specialist techniques and processes to construct a creative three-dimensional sculpture.

KS4

At KS4 we offer GCSE 3D Design which provides opportunities for learners to develop upon their fundamental skills when designing and making new and exciting outcomes using a range of materials, processes and techniques. There are three projects in Y10 that encourage students to produce authentic and personalised responses that they have independently researched having more freedom to explore and experiment with their ideas and possible outcomes, including CAD/CAM and the traditional hand-crafted techniques. In Y11 the knowledge and skills gained allows students to actively engage in their own personalised project.

Areas studied:
Project 1: Architectural Modelling
Analysis and exploration of the structural form and surface decoration within architectural design.
Project 2: Creative Creepy Creatures
Experimental and creative approach to realising possible design intentions using mixed media.
Project 3: CAD/CAM Lighting Box
Accurately create a personal outcome from taking inspiration from projects 1 & 2 combined.
Project 3: Student Focused ESA
Students own personal investigation developed from a past exam theme. Exploring and experimenting with a range of media to create independent and original 3D outcome that is fully supported with contextual references.

KS5

At SUA6 we offer the AQA A Level - Three-dimensional design course that enables students to design and manufacture bespoke products such as architectural models, furniture design, jewellery and product design. This course gives you the opportunity to develop knowledge and understanding through a range of practical skills to create imaginative personal work to develop creativity and independent thought, encouraging you to learn to express yourself visually and let your imagination flourish. This course develops skills in techniques such as drawing, designing, modelling and manufacturing and also develops understanding of research, investigation and experimentation in both visual and written formats. Considerable importance is attached to the practical exploration of processes and techniques as well as the development of finished work. Sketchbooks and portfolios are an integral part of the on-going development of each student's thoughts and ideas.

Links from KS2

- The Design and Technology curriculum encourages students to create high quality design presentation techniques that can be understood by a third person.
- Design sheets are encouraged to record their thought processes when planning new innovative and authentic products, showing knowledge and understanding of materials, processes and techniques.
- We aim to develop and improve their mastery of design techniques, including sketching, designing, modelling and making using a range of materials and processes.
- The DT curriculum builds student knowledge about designers and design movements in a historical and contemporary context.

Experiences

- Opportunities to carry out their own research and investigation process to encourage independent and bespoke products to be manufactured.
- Opportunities for students to create their own bespoke and personalised responses and ultimately increasing their authenticity in the design and manufacturing process.
- Developing written communication techniques through annotations and note making.

Links to CHARACTER

- Build self-esteem and confidence through practical work, skill application and review.
- Students have the opportunity to see how design and technology has made significant contribution to the world in which we live from earlier times to the present day and how modern technology has shaped the craft and manufacturing industry.
- Art an area which contributes to learning in a wider, expressive framework.
- All learners have the opportunity to develop and a confidence to express considered opinions about their own work and the work of others, both in written and aural terms