

3D Design Curriculum Map

2025-2026	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Year 7	All about me Baseline Assessment Health & Safety in the work place Recognise hand & machine tools and their uses Understand safety tests Learn about cultural design and manufactured boards Practical project: Make a bullroarer	Materials Explore the properties of materials Material testing and evaluation Understand the difference between softwood and hardwood and their uses Learn to mark out, follow instructions, to assemble and finish	Protect and Survive Know how historical design periods have influenced how we live today. e.g. Pre industrial revolution, The Industrial Revolution, Arts and Craft Movement, Art Nouveau Know how designing should take account of adverse circumstances incl. natural disasters, and climate change Practical project: Egg drop challenge Castles/Garages/Animal Shelter	Systems and control Learn how components work together to make structures Understand how motion can be used in design Assemble simple electrical components Use circuits in designs Practical project: Morse Code Machine	Strengthening and enhancing materials Learn how to stiffen, fold and bend materials, particularly for modelling Construct 3D objects using a net Learn how different cultures incorporate sustainability into their living environments Practical project: Design and make a 3D sustainable living model from suitable materials	Flight Aviation, kites and boomerangs Learn how early attempts at flying shape the way we travel today, incl space travel Aerodynamics and hydrodynamics Learn how kites have been used over time Use tools to cut and shape to enable flight The influence of culture on the design of boomerangs Practical project: Design, make and fly a kite Design, make and fly a boomerang safely and effectively.
Year 8	Sustainable vessels Recognise ancient monuments around the world, understand their design features, construction and intended uses Learn how early trade routes shaped the world economy through the import and export of goods Interpret instructions and images and understand that these forms of communication are open to interpretation Practical project: Design, make and test a sustainable vessel	World War 1 Learn how technology advanced rapidly due to conflict Camouflage- identify it and its uses in nature and in man-made design Practical project: Make a periscope and/or wooden tank	The Natural World Mark out, cut, shape and join timber Recognise and use hand and electric tools. Use tools safely Drill holes accurately and to the correct depth using the bench drill Use adhesives to join wood together Practical project: Make a habitat box (e.g. bird box)	Canals and culture The history of the canal system and how this shaped the way goods were transported before the invention of the steam train Learn about canal families, how they lived and worked Learn about the design and decoration of a traditional canal boat and the importance of design in small space living Graining Practical project: Design and make a footstool. Use specialist tools and techniques to create the graining	Environment, sustainability and impact Understand how designers and manufacturers have a responsibility for sustainable product design which have a low impact on the environment and are designed to not harm Understand the impact that manufacturing can have on the environment and health	Sustainable living Learn about the changes in climate and resources impact on the way we live Learn about sustainable energy and its use Practical project: Use appropriate tools, materials and techniques to design and model sustainable living space
Year 9	Introduction to 3D design Architecture The role of an architect The development of architecture through history Carry out research to inspire own design Jewellery & body art Throughout history Design own body adornment Employment in the area of jewellery and body adornment Practical project: Design own prototype of jewellery & body adornment using a simple template	Sculpture Ceramics The role of the sculptor How sculpture is used to enhance Employment in the area of sculpting Different types of ceramics, how they are created & their uses Employment in the area of ceramics Create a simple jig to form a repeated process for batch production Practical project: Design and make a simple tile to a set size and depth to represent a manufactured tile	3D Digital Design Interior Design The role of a designer Employment in area of interior design Practical project: Use a 3D software package to design and interior space Create a 3D model reflective of their design using a mixture of materials	Environmental Landscape/ Garden Design Product Roles in environmental design Learn how the environment can be designed to enhance and manage certain human behaviour, wellbeing & health Learn how products have developed through history and how manufacturing has changed in order to facilitate growth The future of design Practical project: Design a purposeful outdoor space, balancing natural and man made materials	Exhibition Design Theatre, film & TV Design Marketing & promotional industry, e.g. display stands, trade shows Employment in marketing & the promotional industry Practical project: Create a design for a promotional space, design their own logo	Revisit areas which the pupils would like to complete or improve Introduction to AQA 3D Design GCSE
Year 10	GCSE Sustained Project The project set is reflective of the interest of the pupil Realise personal intentions Use the creative process Develop & explore ideas Make annotations, communicating intention, response	GCSE Sustained Project continued...	Exam preparation Independent study Record observations	Exam preparation Independent study Record observations	Exam Preparation GCSE Exam	GCSE Sustained project External moderation
Year 11	GCSE Sustained Project- Final Piece Theme set dependent on the interests of the pupil	Mock exam (5hrs) Final piece to sustained project.	Exam preparation Independent study Record observations	Exam preparation	GCSE Exam Internal moderation Portfolio completion External moderation	