BRANNEL SCHOOL
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Curriculum Summary Document

Year 8 – Design & Technology

Developing Designing, Making and Product Improvement Skills

Module/Unit of Learning	Taught During	What will students learn?	How does this help to build a broad and strong foundation?	Links to other Subjects
Design and Manufacture Project	September – December	Students build on prior drawing skills by refining 1-point perspective and generating a mind map to explore the project brief. They write a specification to set clear success criteria before developing initial design ideas. Students analyse existing products to understand quality, function and aesthetics. They learn a range of manufacturing joints and practise assembling components with increasing accuracy. Throughout the unit students focus on safe, effective workshop practice.	This module strengthens students' design thinking and introduces more advanced making skills. Writing a specification and analysing existing products builds a deeper understanding of how real products are designed. The introduction of joints and assembly lays the groundwork for more complex practical work in Y9 and beyond.	Art – drawing and communicating ideas Science – material properties and forces Maths – measurement and scale
Product Development and Evaluation	January – April	Students complete the manufacture of their product before evaluating the basic design against the specification. They refine, develop and improve their product, focusing on accuracy, fitting components correctly and applying appropriate finishing techniques. Students learn how finishing affects quality and usability, and they apply iterative design thinking to improve outcomes.	This unit consolidates accuracy, quality control and independent problem-solving. Students learn how iterative development is used in real design contexts and develop pride in producing a higher-quality final product. These experiences prepare them for more demanding design challenges in later years.	Art – refining creative outcomes Science – understanding finishing processes and material behaviours Maths – precision measurement and geometry
Timber Theory, Sustainability & CAD	April – July	Students study timber as a material, including types, properties, uses and sustainability considerations. They explore how materials are selected responsibly and how product choices impact the environment. Students then develop their CAD skills further using TinkerCAD, modelling increasingly complex components and understanding how 3D design links to modern manufacturing.	Understanding materials and sustainability is essential for responsible design thinking. This module deepens students' knowledge of timber and environmental impact while strengthening digital design skills. Improved CAD confidence prepares students for more advanced modelling software and design tasks in future projects.	Geography – sustainability and environmental impact Computing – 3D CAD modelling and digital design Science – material science and processing

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