

# Fareham Academy Design & Technology Overview – Year 10



Unlocking Potential  
Creating Opportunity

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic(s)	Technology in manufacturing  Bespoke sanding block	Watch/Jewellery presentation stand	Maths in technology  Cookbook stand	Cookbook stand  Energy sources	Contextual challenge	Contextual challenge
Topic Objectives	Explore Technology Push/Market Pull.  Investigate new and emerging technologies.  Compare and contrast ergonomics and anthropometrics.	Investigate timbers.  Create a situation and brief, specification and cutting list.  Communicate design ideas.	Investigate material area, material quantities and percentages.  Explore natural wood joining techniques.  Create hinge manufacture.	Explore finishing natural materials techniques.  Compare and contrast renewable and non-renewable energy.  Research local energy facilities.	Explore contextual challenges.	Investigate.
Acquired Knowledge/ Skills	Research and investigate core technology knowledge.  Explore design and technology industry and enterprise.  Create ergonomic sanding block as a bespoke item.	Explore expectations of the contextual challenge and coursework portfolio.  Explore communication styles including hand drawing skills and CAD.  Complete a Life Cycle Analysis to review product impact.	Investigate maths in technology by applying it to real world situations.  Create a half-lapped mitre and a half-lapped dovetail framework.  Create an articulating hinge mechanism for a height adjuster.	Explore the working properties of natural materials.  Differentiate between the energy sources.  Research local methods of producing energy.	Research leading to a chosen theme.	Explore chosen challenge.
Assessments	Fortnightly mini core assessments: - Investigate - Design - Make - Evaluate	Fortnightly mini core assessments: - Investigate - Design - Make - Evaluate  Mini mock summative assessment	Fortnightly mini core assessments: - Investigate - Design - Make - Evaluate	Fortnightly mini core assessments: - Investigate - Design - Make - Evaluate	GCSE contextual challenge  Fortnightly mini core assessments: - Investigate - Design - Make - Evaluate	GCSE contextual challenge  Fortnightly mini core assessments: - Investigate - Design - Make - Evaluate