

Your 5 Year Journey through

Product Design

Realise Design ideas: Manufacture your product using skills and processes used throughout your DT journey.



Generate & Develop Design Ideas: Develop your sketches and communicate ideas. Developing them using modelling techniques



Investigate the design possibilities: Explore the given context and suggested practitioners What research can you carry out to gather ideas?.

Generate & Develop Design Ideas: Develop your sketches and communicate ideas. Developing them using modelling techniques



Materials / Make: Use materials you have not combined before such as concrete, acrylic and timber to develop a unique stylized product.

Initial Concept Sketches: What ideas do you have already? Can you visualize them?



Investigate the design possibilities: Explore the given context and suggested practitioners What research can you carry out to gather ideas?.

FINAL 10HR EXAM

COMPONENT 2 GIVEN CONTEXT

COMPONENT 1 DESIGNER LIGHTING

YEAR 11



Summer Project: Set mini-project of student choice to investigate and present as further



Design: Design movement influenced furniture

Materials: What materials will be appropriate for your product? What materials are sustainable?



Manufacture: Use a wide range of tools and processes to produce your final product.

Design: Reference key design movements top to develop a stylish functional product.

Testing / Modelling: Use various testing and modelling methods to develop your product



Realise Design ideas: Manufacture your product using skills and processes used throughout your DT journey.

MEMPHIS INSPIRED FURNITURE

FLOATING TABLE

COMPONENT 1 ARCHITECTURAL DESIGN

MOCK EXAM 10HR FINAL OUTCOME

Evaluate: What skills have you developed? Evaluate your product and consider how you would improve it.

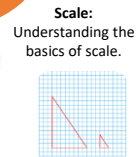


Make: Use of CAD to 1mm tolerances

MATHEMATICAL MODELLING PRACTICE



Materials: Plywood, acrylic, mdf why do we use them? Advantages? Disadvantages?



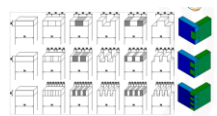
Materials: Working with acrylic, mdf & ply, to create a scale architectural model.



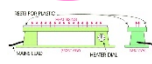
Explore: Develop independence in CAD using 2D design and explore its function and capabilities

Design: Creation of ideas, development and scale drawing

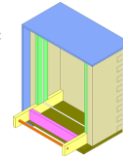
Measuring and marking: Use of specialist tools to mark wood joints to a tolerance



Specialist processes: Cutting, drilling & finishing wood and heating and bending plastic



Final manufacture: Creating a high-quality final outcome to scale and within tolerance



CAD/CAM Understanding CAD/CAM. What are the advantages and disadvantages.

CAD/CAM Architectural Modelling

YEAR 9

Materials: The origins of timbers and plastics and their impact on the environment



Technical drawing: Following a pattern and tessellation



Technical drawing techniques: Understanding isometric and perspective drawing

Key designer knowledge: To understand and be inspired by design



DEVELOPING PROTOTYPING SKILLS

TECHNICAL DRAWING TECHNIQUES

Numeracy: Working with specific equipment and measurements to mark out nets and shapes with specific equipment

Drawing tutorials: Mirroring tutorials to understand design ideation and how to be creative with shape and design.



Manufacture: Use the workshop tools and machines to manufacture your final piece



Evaluate: Does your product meet tolerances and criteria set? How could you improve?

YEAR 8

TALKING HEAD PROTOTYPE



MEASURING & MARKING SKILLS BUILDING

DEVELOPING DRAWING SKILLS

YEAR 7



Introduction to the workshop: Health and Safety

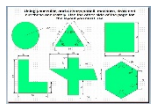


Use of tools and equipment: What do you already know about DT?

Materials: Where does card come from?



Measuring and marking: Use of templates and measuring equipment



KS3

FOCUS

Develop and embed crucial measuring, marking and manufacturing skills.

Understand the design processes.

Recognise the importance of working safely & sustainably.

Produce a range of high-quality prototypes.

Evolve a range of CAD/CAM skills, honing your numeracy and design skills, improving your resilience & problem-solving ability

Deepen your understanding of DT in the world around us by developing architectural designs and models that meet users needs.

This learning is the foundation of Product Design