# Three Dimensional Art and Design GCSE

**FINAL GCSE EXAM**

AO4 Personal Presentation
Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.

AO3 Reflective Recording Record ideas, observations and insights relevant to intentions as work progresses.

AO2 Creative Making
Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes.

**Exam Prep**

AO1 Critical Understanding
Develop ideas through investigations, demonstrating critical understanding of sources.

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

**Investigate the design possibilities:**
What is the design context? What research can you carry out to gather ideas?.

**Year 11**

**Individually Chosen Theme**

AO1 Critical Understanding
Develop ideas through investigations, demonstrating critical understanding of sources.

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

**Investigate the design possibilities:**
What is the design context? What research can you carry out to gather ideas?.

**Design:**
Create an artifact exploring the theme.
Reference key design movements top to develop a stylish functional product.

AO2 Creative Making
Refine work by exploring ideas, selecting and experimenting with appropriate media, materials, techniques and processes.

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

**Make:**
Use a wide range of tools and processes to produce your final product. You decide.

AO3 Reflective Recording Record ideas, observations and insights relevant to intentions as work progresses.

AO4 Personal Presentation
Present a personal and meaningful response that realises intentions and demonstrates understanding of visual language.

**YEAR 10**

# KS4

# Design and Technology Learning Journey

## Year 10

**BOX PROJECT: Designer Box**

**Make:** Addition processes & wood joints. Using skills to develop high quality craftsmanship products.

**Design:** Focus your idea on the work of famous designers, use architecture or product design as inspiration.

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

**DESIGNER LIGHTING**

**Evaluate:** At each stage of making, how can you improve your product? Would you change any thing?

**Make:** Develop your design through iterative processes and modelling, testing & evaluating before making a final product.

**Film Set Design**

**Design:** Designing for a user and client. Designing to scale, cresting scale models.

**Materials:** Working with plastics, resins and wood to create a final product.

Deepen your understanding of DT in the world around you whilst developing products that help various needs and users.

## YEAR 9

**MECHANICAL TOY PROJECT**

**Materials:** Timbers - hard woods and softwoods, why do we use them?

**Cams / motions & movements:** What do cams do? How do they work?

**Design:** Isometric projection, CAD development

**Testing / Modelling:** Will my product work? What can I do to improve it?

**Make:** Can you make an accurate product using machines and tools independently? Develop independence in CAD using Autodesk design software to make complex design ideas.

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

**FILM SET PROJECT**

**Design:** Designing for a user and client. Designing to scale, cresting scale models.

**Materials:** Working with plastics, resins and wood to create a final product.

**Make:** Can you make an accurate product using machines and tools independently?

**Evaluate:** At each stage of making, how can you improve your product? Would you change any thing?

**Mood Light**

**Materials:** Working with plastics, resins and wood to create a final product.

**Design:** Isometric projection, CAD development

**Make:** Develop your design through iterative processes and modelling, testing & evaluating before making a final product.

Work in more depth on projects, honing your practical skills, improving your resilience & problem solving whilst developing independence in the workshop.

## YEAR 8

**CAD CLOCK PROJECT**

**Make:** Thermo - Forming Shaping manufactured boards Basic circuitry and soldering

**Design:** Designing with restrictions Orthographic Projection & Rendering

**Evaluate:** Does your product work? How can you fix problems?

**Materials:** Working with acrylics and vinyl, cutting and finishing techniques.

**Design: CAD** What is computer aided design? Learn to use the basics of 2D software to design products

**Make:** What is CAM? Use the Vinyl to produce your final product!

**Evaluate:** How has CAD / CAM helped you make a product?

**NIGHT LIGHT PROJECT**

**Materials:** Polymers Classification. What is a polymer? What is a circuit?

**Evaluate:** What makes a good scale model? How can you improve your skills?

**Make:** Cutting Knives and hot Glue. Layering effects.

**Design:** Designing for a user and client. Designing to scale, cresting scale models.

**Materials:** Card stock and polystyrene

## YEAR 7

**ISLAND PROJECT**

**Baseline Assessment:** What do you already know about DT?

**Introduction to the workshop:** Health and Safety

Experience a wide range of fun and exciting projects that teach you valuable skills in the workshop, understanding different materials and how they work.

# KS3