



Product Design

Awarding Body: AQA

Level: A-Level

Introduction

*"Design is not just what it looks like and feels like. Design is how it works."
Steve Jobs: Apple*

The design process, at its best, integrates the aspirations of art, science, and culture, it is intelligence made visible. Everything you touch or use has been designed by someone. We often complain when an object does not live up to its promise, but good design is a lot like clear thinking made visual, and fit seamlessly into our lives.

Product Design gives you the chance to get creative and innovative to develop products to enhance life. You will develop design skills and learn about the complex relationships between design, materials, manufacturing and marketing. Product design covers all areas of the design process and you will explore innovative materials and equipment to bring your designs to life.

Through projects, students will have the option to explore Fashion, Graphics, Furniture and Architecture alongside more traditional products. Students will be able to consider existing ideas, test them where appropriate and consider developments needed to modify them for a more challenging market. From these designs and ideas, students will develop prototypes of their products, test and make alterations to their ideas. Then modifications students will make will influence them to produce a working outcome and consider the requirements for commercial manufacture.

Year one content

We cover a multitude of theory through practical mini projects – for example: 3D shapes working out volumes and size then using the models to create flat packed lighting, using 2D design and the laser cutter. Look at the casting processes by making pewter and resin jewellery. They will look to improve their wood work and resistant materials processes in a box projects, Upcycling plastic into a textiles piece by understanding the 6Rs, how thermoforming plastics can be used and creating architectural models with papers and boards etc. Throughout the course theory knowledge will be covered and checked regularly to

ensure students are confident in their written papers. The NEA (Non-Examination assessment) is introduced to students in the June and students can choose with direction they want to take their projects into.

Year two content

Will be focussed on working through your NEA. You will start with designs, modelling and development of prototype. Once you have manufactured your prototype you will then test and evaluate your outcome. Once you have completed your NEA we will focus on your exam skills and targeted revision, linked to the projects covered.

Assessment

Paper 1: Technical Principles. A written paper taking 2.5 hours and worth 120 marks and 30% of A-Level.

Paper 2: Design and Making Principles. A written paper in sections A + B taking 1.5 hours and worth 80 marks and 20% of A-Level.

NEA: Practical application of the above with a Design + Make Project worth 100 marks and 50% of A-Level.

What you need

Students will need a Grade 5 or above in Technology, Art or Photography GCSE, students who have studied Art GCSE may be considered.

Career and further study

Following a Product Design course there are a wide variety of careers that students could follow such as degrees in Aeronautical Engineering, Architecture, Art and Design, Electrical/Electronic Engineering, Education, Engineering, Fashion, Materials Science and Mechanical Engineering.

These can lead to careers in all aspects of design from Interiors, Product designers, CAD Technicians, Architects to Project managers.

Trips and other costs

You are expected to purchase your own textbooks and certain materials depending on their design work.