

Subject: Product Design

Level: AS Level and A Level



This broad-based, wide-ranging course will be of interest to all students of Design Technology at GCSE, whatever subject you have followed.

Course Outline (Exam Board: AQA)

The course has been designed to encourage students to take a broad view of design technology and manufacturing, to develop their capacity to design and make products and to appreciate the complex relations between design, materials, manufacture and marketing.

The course is intended to reflect the wide-ranging activities of professional designers and covers a wide range of materials. Graphical communication is an integral part of the work. Project work will result in 3D/2D products that will be designed, developed, modelled, tested and manufactured by the student.

What will I learn on this course?

This course will enable you to:

- Understand the properties and uses of a variety of natural and manufactured materials and selecting materials to solve design problems;
- Recognise and use components in the assembly of manufactured items;
- Appreciate how line, shape, form, colour, tone, texture, proportion and materials affect the functional and aesthetical qualities of products. In addition you will learn how design movements have influenced past and present products and design classics;
- Use Computer Aided Design and Computer Aided Manufacture to design and model 3D outcomes;
- Use a variety of drawing techniques to communicate ideas and solutions; the ergonomic features that designers need to consider when developing solutions to problems;
- Use the most appropriate system for product manufacture;
- Use tools, equipment and processes to manufacture products of your own design to a high level of accuracy;

Who would be a successful student of Product Design?

This course will appeal to students who:

- Are interested in developing further their problem-solving skills within design and technology;
- Are keen to develop their IT skills in all areas from CAD/CAM to Powerpoint;
- Enjoy making products in response to a given problem or one that they have identified;
- Can use their imagination to develop solutions to problems;
- Are interested in learning how product design can be influenced by styles and cultures;
- Wish to learn more about how products are manufactured in industry;
- Are happy to work independently.

Extra-Curricular Activities

These could include:

- Visits to the Design Museum, V&A Museum, Science Museum and manufacturers or Ikea warehouse;
- Study day at the University of London.

Career Opportunities

You will find this course useful if you wish to follow a career in the following areas:

- Graphic design/3D design/product design/interior/fashion design;
- Teaching;
- Architecture;
- Engineering;
- Manufacturing.

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Course Structure

AS Level

Unit 1

Materials, Components and Application (50% of AS level marks; 25% of total A level marks) Exam (2 hours).

Unit 2

Learning through designing and making (50% of AS level; 25% of total A level marks) Coursework portfolio.

Two design and make assignments will be set over the year and parts of each assignment will be used to generate the final mark.

A Level

Unit 3

Design and Manufacture (25% of total A level marks) Exam (2 hours)

This is a written paper on the themes of materials and components, design and market influences and processes and manufacturing.

Unit 4

Design and Making Practice (25% of A level marks) Coursework Project.

This is a single design and make piece of coursework that lasts fifty hours and is chosen by the student. The product that is designed and made must include a 3 dimensional outcome and can combine any materials that are necessary to create the solution.