



A Level Product Design

Product Design

Why study Product Design?

In today's rapidly advancing world where the use of the planet's resources is to be considered carefully, designers are rising to the exciting challenge of rethinking and re-designing products in a more sustainable way. Advances in modern materials and technologies are increasing the possibilities and opportunities to create products that are innovative in new and imaginative ways.

What is the course structure?

A-Level Assessments

Paper 1: Core technical principles; Core designing and making principles

(Written exam 2½ hours, 25% of A-Level)

Paper 2: Specialist knowledge; Technical knowledge; Designing and making principles

(Written exam 1½ hours, 25% of A-Level)

- Classifying materials and identifying, testing and comparing their application to product manufacture
- The implications of Health & Safety as an element of design activity
- Examination of alternative designs and redesigning existing products
- Use of natural resources, materials utilisation, conservation, waste disposal/management, pollution, recycling
- Appreciation and understanding of the use of CAM for industrial production
- The impact of changes in technologies and cultures on the work of designers
- Planning production procedures and methods in industrial and commercial practice

Non-exam assessment

(100 marks, 50% of A Level)

- A written (or digital) design portfolio and manufactured outcome completed over approximately 45 hours.

Which activities will I be engaged in during the course?

- Testing and comparing materials and their capabilities
- Assessing the sustainability of products
- Visiting the Design Museum in London
- Carrying out independent market research
- Developing design sophistication
- Using CAD/CAM to produce professional quality products
- Producing comprehensive design portfolios
- Developing independent study skills

How can I prepare for the course?

- Watch programs on Discovery Science such as Tech Toys 360, How Do They Do It?, Extreme Engineering, Inside the Factory, How It's Made and How Stuff Works.

- Visit <https://www.aqa.org.uk/subjects/design-and-technology/a-level/design-and-technology-product-design-7552/specification-at-a-glance>
- Have a look at design websites like <http://www.itsnicethat.com/categories/product-design>
- Look at university websites showcasing undergraduate projects to get an idea of what innovative designs are being developed and where studying Product Design A Level could lead.
- Research Alessi products and the different designers who have worked for the company such as Norman Foster, Aldo Rossi, Philippe Starck and Michael Graves
- Develop a presentation style by experimenting drawing a variety of household objects. Concentrate on the form of the object and try to make it look 3D.
- Watch clips on YouTube about manufacturing processes
- Play around with Google SketchUp- free downloadable 3D CAD program
- Watch interviews on <http://designmuseum.org/designers/designers-in-residence>
- Visit the library and have a look at a selection of the books below.

Recommended reading

- The Eco-Design Handbook by Alistair Faud-Luke
- Designs of the Times by Lakshmi Bhaskaran
- Cool Hunting Green by Dave Evans
- Design Museum: Contemporary Design by Catherine McDermott
- Arts & Crafts Companion by Pamela Todd
- 50 Product Designs: Process by Jennifer Hudson
- Bauhaus by Benedict Taschen
- Making IT Manufacturing Techniques for Product Design by Chris Lefteri
- Memphis by Bigitte Fitoussi
- The Measure of Man and Woman: Human Factors in Design by Alvin R. Tilley and Henry Dreyfuss Associates
- Drawing for Designers by Alan Pipes
- Designed for Kids by Phyllis Richardson
- German Design: The Classics by Bernd Polster
- Italian Design Daab

Subject Entry Requirements: Grade 5 in Mathematics or Grade 5 in Product Design

Further information: Mrs M Curd