

## Product Design AS and A level (Edexcel Three-dimensional Design 8032 and 9032)

### What is the course about?

· researching · analysing · drawing · sketching · developing · modelling · making  
· prototyping · computers · industry · architecture · engineering · furniture · products

You will be involved in designing, creating, and solving problems in order to meet functional and aesthetic needs. The emphasis is on learning how and why products are designed and made, and how you as a designer can make improvements.

If you like the idea of designing using freehand drawing as well as computer-generated techniques, and you want to make products using a variety of resistant materials then this is the course for you.

In your first year, for AS level you will develop your designing, sketching, CAD, and making capabilities through a series of short projects and activities culminating in your own project. You will also undertake an exam board set project at the end of the year.

In your second year, for A level you will extend and develop further your technical understanding of materials and manufacturing processes as well as your capabilities to generate ideas through drawing and CAD. You will undertake a personal study of a designer or design movement as well as complete an extended project of your own choosing. Again you will also complete a second project set by the exam board.

If you enjoy working with resistant materials such as wood, metals, and plastics and have an interest in designing products, furniture, engineering, architecture and building design then opt for this three-dimensional product design course.

### What will I be doing each week?

· learning new techniques for: drawing, sketching, and generating ideas · using the computers for 2D and 3D designing · learning how to use the workshop equipment through exercises · one-to-one weekly tutorials · learning about materials · learning about commercial manufacturing · filling your design book with ideas, techniques, and notes

Your week is divided into different sessions initially, each designed to help improve your drawing and designing techniques. As the term progresses some of the time is still devoted purely to techniques extending your abilities to record your ideas as well as making; and some of the time is devoted to understanding technological issues (material properties, manufacturing processes, and design movements). Gradually more and more time is given over to your project work.

You will be designing furniture and products set by your teacher, but later you can choose your own project area.

A key difference you will notice from school is our departmental tutorial system. You will receive regular one-to-one sessions with your lead teacher to help discuss your progress and to plan your project work.

Visits trips and speakers also play an important part in the course. Each year we take students to London, to the Young Designers' Degree Show and to Munich to tour the BMW factory, the Allianz Arena, and The Pinakothek Design Museum.

### Can I do the subject without having done the GCSE?

Yes. Most students have studied a GCSE in one of the Design Technology subjects but if you have not do not worry we will still consider you.

## What are the facilities?

· multi-media workshop · laser · proDESKTOP · technician help

The department is based in a new, purpose built set of rooms offering a design studio with CAD/CAM facilities (including a laser machine) as well as a well-equipped workshop. We use Corel, Photoshop, and proDESKTOP software in our teaching areas. You will also be given a copy of our design software for use on your own computer. We operate an Open Access policy – which means you can use the facilities any time you do not have a lesson as well.

## How will I be assessed?

· 100% coursework · two units: own project + exam project · folder work + Design Book

This is an entirely coursework assessed A level. There are no written exams and the good news is that it is one of the first subjects to move over to two assessment units for each year.

At the end of your first year you will be submitting a design book, a range of A3 design sheets, and a series of models, prototypes and working design solutions.

Your design book will contain evidence of the techniques we have taught you through set exercises and short projects; evidence of your own extended project (to include research, analysis, designing, and making); and preliminary design work for the exam board-set project.

In your second year this pattern is repeated, but you will also submit a personal study of the work of a designer or design movement.

UNIT	TITLE	METHOD	% AS
1	COURSEWORK	COURSEWORK SET BY TEACHER Portfolio of techniques, and own project	60
2	SET ASSIGNMENT	EXTERNALLY SET EXAM PROJECT	40

UNIT	TITLE	METHOD	% A
3	COURSEWORK	COURSEWORK Own project, personal study	30
5	SET ASSIGNMENT	EXTERNALLY SET EXAM PROJECT	20

For both your coursework and the exam project you will be assessed on your ability to record your research and ideas; analyse and evaluate; develop ideas; realise your designs.

## What qualifications are recommended?

· five GCSE subjects at Grade C or above including English and Mathematics.

Most of you will have done a GCSE Design Technology option but lots haven't. It's not necessary to have done it and, because the 'A' level is so different from GCSE, we teach as if you're all starting from scratch.

This subject combines well with both the Arts subjects (such as Art and Design, Textiles, Photography, and Media Studies) and the Sciences (Physics, Maths, and Further Maths).

## What are the progression routes with this qualification?

· architecture · engineering · furniture design · industrial design · product design

This course is highly regarded by the universities as an excellent foundation for degree study in any design field. However it is particularly useful to those of you considering architecture, engineering, furniture, interior design, theatre design, and of course especially industrial and product design. With either the AS or A Level you can simply use it as an entry subject for any university course.

**Design is for life, not just for examinations. Feel free to visit the department at any time, and see for yourself.**