

The background of the image is a technical drawing or blueprint. It features various mechanical components, including gears, springs, and structural frames, rendered in blue lines on a light background. Overlaid on the drawing are drafting tools: a large metal compass is positioned diagonally across the upper right, and a ruler with numerical markings is visible in the top right corner. The overall color palette is dominated by the blue of the drawing lines and the metallic tones of the tools.

# Design and Technology

**AS/A level Product design**

Do you like to ...  
Solve problems

**DRAW**

Create

**MAKE**

**FIX**

take risks

**Invent**



# What grades do you need?

## Entry Requirements:

Students must have attained a **grade C/Pass or above in Product Design, Graphics, Textiles or Engineering** at GCSE and a **grade C or above in English**. This course is intended for those students who wish to pursue, extend and develop their studies of Design and Technology to greater depth than required at GCSE.





# What is the course structure?

## AS:

**AS Unit 1: Written paper 1 Written examination: 2 hours  
20% of qualification**

**AS Unit 2: Design and make task Non-exam  
assessment: approximately 40 hours 20%**

## A Level:

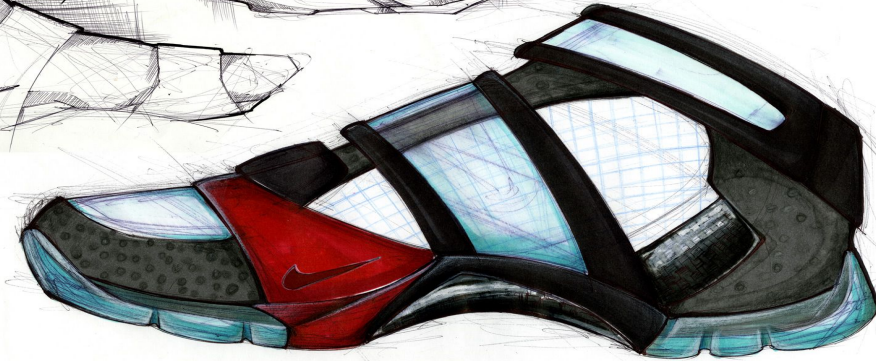
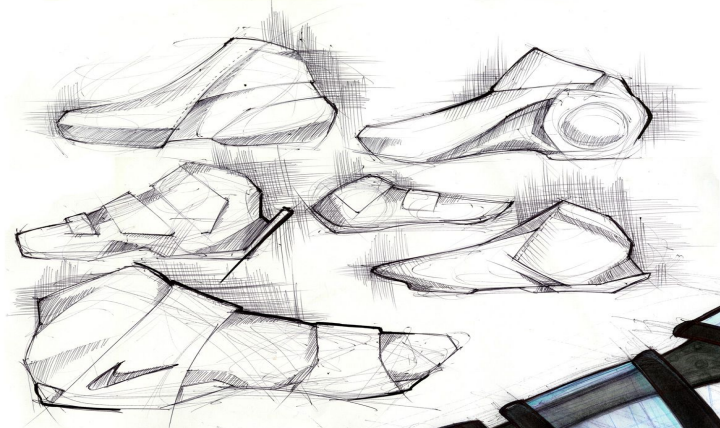
**A2 Unit 3: Written paper 2 Written examination: 2 hours  
30 minutes 30% of qualification**

**A2 Unit 4: Design and make project Non-exam  
assessment: approximately 60 hours 30% of  
qualification**



# Why Choose Product Design?

**Taking Product Design widens your horizons and gives you opportunities:**



**Problem solving skills**

**Creative skills**

**Communication skills**

**The chance to make stuff**

**Technical ability**

**Have fun**

**Understand applied Maths and Science**

**Organisation skills**

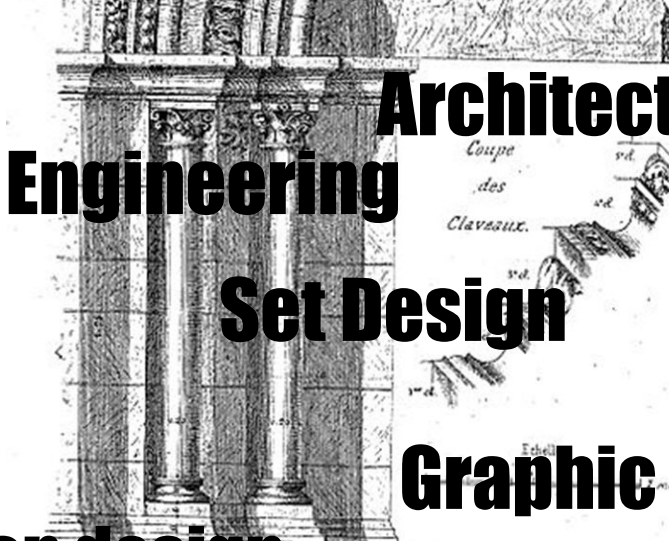
**Discipline**

**Transferable skills**

# Careers using design technology



**Fashion design**



**Architecture**  
**Engineering**  
**Set Design**



**Car Design**



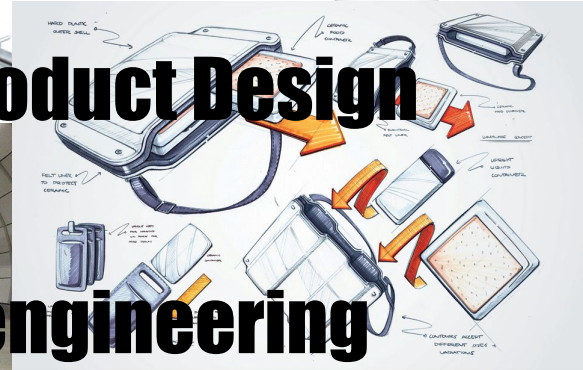
**Graphic Product**



**Civil engineering**

**Surveyor**

**Industrial Design**



In order to protect the ceramic vessels during the commute, several carrying cases were also explored.



# Previous student's work



**Fashion**



**Childrens education**

**Guitar stand**



**Influenced by  
Design  
movements**



**Textiles**



**Sculptural lighting**

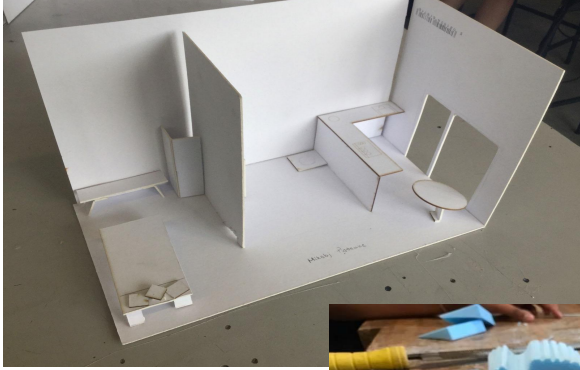


**Child Development**



# Previous student's work

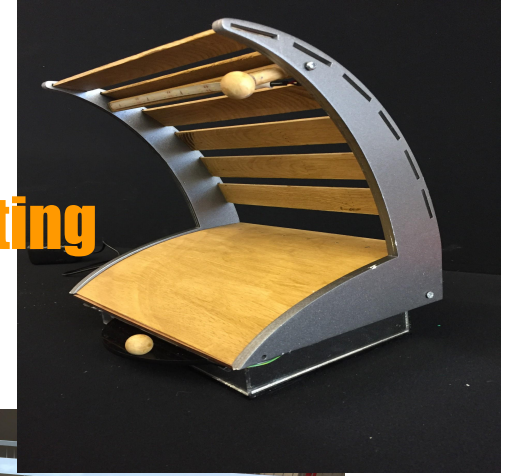
## Architecture



## Furniture



## Lighting



## Lamps



## Model making



## Recycling materials



# Career paths using design technology:

Click on the jobs to link to UCAS website:

## Aerospace engineer

Aerospace engineers design and build aircraft and spacecraft

## Animator

An animator draws and animates characters, buildings, objects and landscapes.

## Arboricultural officer

Arboricultural officers manage and maintain trees for local councils and arboricultural contractors.

## Architect

Architects design and create plans and technical drawings of buildings.

## Barber

Barbers cut and style men's hair and beards.

## Bricklayer

Bricklayers build and repair walls.

## Building control officer

Building control officers make sure regulations are followed when buildings are being constructed.

## Cabinet maker

Cabinet makers make wooden furniture.

## Carpenter

Carpenters make and maintain wood fixtures in buildings.

## CNC machinist

CNC machinists use computer numerically controlled machine tools to create parts used in industry.

## Engineering craft machinist

Engineering craft machinists make parts used in manufacturing and engineering.

## Model maker

Model makers design and make 3D scale models to show how new buildings or products will look.

# Careers using design technology

## **computer service and repair technician**

Computer service and repair technicians repair/maintain hardware, and install/repair software.

## **Computer-aided design technician**

Computer-aided design technicians use computers to design and manufacture buildings and machinery.

## **Costume designer**

Costume designers are in charge of the look and creation costumes and outfits.

## **Dog groomer**

Dog groomers keep dogs' fur coats in good condition.

## **Electrician**

Electricians install and maintain electrical systems.

## **Estate agent**

Estate agents advertise, sell, and negotiate sales of property.

## **Fine artist**

Fine artists create drawings, paintings, sculptures, and moving pictures, using a variety of media.

## **Firefighter**

Firefighters control and put out fires.

## **Gardener**

Gardeners design, manage, plant, and tend gardens.

## **Hairdresser**

Hairdressers cut and style hair.

## **Lighting technician**

Lighting technicians produce, rig and build lighting systems used in film, TV and live events.

## **Locksmith**

Locksmiths are skilled in the installation and repair of locks and other security devices.

# Careers using design technology

## Photographer

Photographers take pictures of people, landscapes or things.

## Plasterer

Plasterers coat the inside walls of buildings with plaster to make them ready for decorating.

## Plumber

Plumbers fit and repair water systems.

## Primary school teacher

Primary school teachers teach children from the ages of four to 11

## Quantity surveyor

Quantity surveyors manage the costs and budget of a building project from outset to completion.

## Royal Navy rating

Royal Navy ratings work onboard ships and submarines.

## Secondary school teacher

Secondary school teachers teach children from the ages of 11 to 18.

## Set designer

Set designers create the overall look of a theatre, television or film production.

## Signwriter

Signwriters produce hand-painted signs for places such as historic buildings, fairgrounds and shops.

## Telecommunications engineer

Telecommunications engineers fit and maintain phone and internet systems.

## Television/film producer

Producers manage media projects from beginning to completion.

## User acceptance tester

User acceptance testers test websites and software to see if they work properly before they go live.

## Window fitter

Window fitters install new or replacement windows, conservatories and glazed curtain walls.

## Youth and community worker

Youth and community workers provide support for young people.



# Careers using design technology

## Medical illustrator

Medical illustrators produce photographs, videos and graphical images for use in healthcare.

## Nail technician

Nail technicians look after, shape and decorate people's finger and toe nails.

## Offshore roustabout

Offshore roustabouts keep the drilling area of an oil or gas rig in good working order.

## Pattern cutter

Pattern cutters create patterns based on drawings from a fashion designer.

## Personal shopper

Personal shoppers advise customers on what items they should buy.

## Petroleum engineer

Petroleum engineers are involved in all parts of the oil and gas production process.

## Skills and qualities - from studying design technology

- **Technical ability**

You may need particular technical skills and specialist knowledge of how things work or need to be designed and built.

- **Problem solving**

Some jobs particularly require problem solving skills and creative thinking to recognise problems and their causes, to identify a range of possible solutions and then assess and decide the best way forward.

- **Organisation**

You'll need to be able to plan and schedule work. This could include being able to prioritise what needs to be done and by when.

- **Communication**

If your job requires verbal communication, you may need to write or give speeches and presentations. For jobs which require written communication skills, you will need to write clearly and convincingly – you could be producing or dealing with legal documents or writing articles for a newspaper. You may also require good listening skills, the ability to negotiate, or to be persuasive.

- **Creativity**

You may need specific artistic or design skills for a job, or you may need to draw on a good imagination to come up with creative solutions to business challenges.

- **Business management**

Some jobs require a good understanding of how businesses work and the management skills to help the business run smoothly and succeed.

- **Analytics**

You'll be collecting and examining information in detail to arrive at a solution, to answer a key question or make an informed decision.

- **Customer service**

Any job which involves contact with customers and the public requires good customer service skills. Whether it's on the phone or face-to-face it's important to be able to make customers feel welcome, to be polite and listen.

- **Discipline**

You need to know and do what is expected of you. This ranges from organising yourself, being on time, to being responsible. Some jobs need particular discipline skills such as being able to persevere with the task and plans until you accomplish them, or following strict procedures.