

Design and Technology

Eduqas WJEC

GCSE



Course Description

EDUQAS GCSE Product Design requires students to identify and solve real problems by designing and making products. It combines a combination of designing and practical skills with knowledge and understanding in order to ensure that students have the skills to progress on to further employment. Students will work with computer aided design software and materials including woods, metals and plastics. The theory topics are Product Analysis, Sustainability and Legislative Issues, Designers, The Design Process, Commercial Manufacturing Practices, Materials and Components, Environmental issues, Making, ICT, CAD/CAM, SMART materials, textile materials and properties, mathematical problems addressing design, Systems and Processes. These will be taught through projects where students will be assessed on each topic. Projects include:

What topics will I be covering?

- Designing a prototype of a product in line with a specific brief, experiencing a range of materials and processes.
- Designing and making a customer focused product using a range of materials, exploring CAD/CAM.
- Designing and making a storage devise, developing skills of wood joints, manufacturing processes and developing understanding of ergonomic design.

How much of the course is examination or Controlled Assessment?

The Controlled Assessment is 50% of the final grade (completed September - March of Year 11) and the Exam is the remaining 50% (a two-hour paper sat in May of Year 11). The design briefs for the Controlled Assessment are set by the exam board and change yearly; they range from model making of electronic devices, to lighting inspired by design movements, to helping aids for people with disabilities, to jewellery and perfume bottles, including the branding and advertising.

How much work is required after school?

Students will be set additional revision and homework and this is expected to be completed on time. Students will be expected to complete extra preparation for their Controlled Assessment and practical work in between sessions which are held at lunchtimes and after school.

How is the work assessed and when?

All of the projects will be assessed against GCSE mark schemes. Each project will cover a range of designing and making skills and exam theory needed for success in Year 11. Students will sit real practice examination questions every half term to ensure their examination skills and subject knowledge is up to date.



What do I need to achieve a good grade?

You will need to:

- be analytical and be able to evaluate products in detail and identify how to improve by making a range of suggestions;
- be imaginative, creative and demonstrate innovative thinking to produce suitable designs for a range of target markets;
- be able to focus and dedicate time to the same topic for a long period of time when completing the controlled assessment;
- be confident with their drawing ability and patient with practical work;
- be prepared to learn about and memorise a wide variety of different materials, processes, symbols and designers;
- be able to work independently and to strict deadlines to produce the highest quality product possible.

If I want to study the subject after GCSE, what grade must I get?

This depends on the course chosen; for example, A Level Product Design or Textiles would require a 6 or higher, BTEC Level 2 Diploma or Level 3 Extended Diploma Art and Design courses require a 5.

What career options lead from this subject?

A range of careers will be available to you which include Product Designer, Graphic Designer, Packaging Designer, Fashion Designer, Digital Designer, Designer of User Experiences, Computer Aided Designer and Architect.

