

Guilsborough Academy Sixth Form

KS5 CURRICULUM

Course Title: A–Level Design and Technology: Product Design

Examination Board: AQA



Entry Requirements: Grade 5 in GCSE Design & Technology; Product Design/ Electronics/ Resistant Materials.

Assessment:

- Extended coursework project (NEA) –50%
- Paper 1: Technical Principles Exam–30%
- Paper 2: Designing and Making Principles – 20%

Is This Course Right For Me?

If you are interested in design, enjoy problem solving and testing out solutions then this is the course for you.

A-level Design and Technology: Product Design is a qualification that combines all materials areas and develops students knowledge and understanding of designing and engineering.

Students will develop the skills required to design and make products and appreciate the complex relations between design, materials, manufacture and marketing. The subject is also a great introduction to engineering and using practical solutions to solve and overcome design problems.

In first half of Year 12; students work on a portfolio based around several projects that will help to build up practical and design skills. Students will then work on their major coursework project where they set the design brief themselves and can design and make a project from any material combination that they wish.

Unit Contents:

A-Level Paper 1: Technical Principles—30%

- 2.5 hour paper that is a mixture of short and long answer questions.
- Questions will test students understanding of materials and processes commonly used to manufacture products.

A-Level Paper 2: Designing and Making Principles—20%

- 1.5 hour paper that is a mixture of short and long answer questions.
- Questions will test student's understanding of product analysis and methods of commercial manufacture.

Coursework Project—substantial design and make Task (NEA—non-exam assessment) - 50%

- Students can choose their own design brief and are not limited by the exam board.
- 45 hours on producing the finished outcome and a design portfolio of approximately 45 pages.

Progression:

Product Design incorporates many skills and areas of knowledge that can be used in conjunction with other subjects. This subject can therefore lead to many varied careers including; Engineering, Automotive Design, Sports Innovation, Architecture, Human factors design, Product manufacture, Graphic Design Engineering, Furniture design, Computer Programming and Set design for TV/film industry

Example of university courses :

- **Loughborough University BSc(Hons) Product Design and Technology** (ABB from 3 A-Levels including A-Level Physics or Maths, plus grade B in A-Level Design and Technology or Art and Design)
- **Brunel University London BSc Product Design** (GCE A-level ABB, including at least Grade B in Design and Technology, Product Design, Art or Art and Design and at least Grade B Maths or Physics (General Studies not accepted).
- **Birmingham City University BSc Product Design** (BBC at A-Level or 280 UCAS tariff points from A/AS Level with a minimum of 2 A-Levels)
- **Sheffield Hallam University BEng (Honours) Materials Engineering** (280 points from GCE/VCE A levels)

Further Information Contact:

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