

SUBJECT: A Level Product Design

YEAR: 12 & 13

HEAD OF DEPARTMENT: Mrs Brogan

GROUPING POLICY: Year 12 and Year 13 are taught separately

EXAM BOARD: AQA

COURSE CONTENT:

Students will follow the AQA Specification:

<http://www.aqa.org.uk/subjects/design-and-technology/as-and-a-level/design-and-technology-product-design-7552>

A Level Design and Technology: Product Design requires students to engage in both practical and theoretical study. This requires students to cover design and technology skills and knowledge in the following two areas:

Technical Principles

Areas covered include:

- Materials and their applications
- Performance characteristics of material
- Enhancement of materials
- Forming, redistribution and addition processes
- The use of adhesives and fixings
- The use of finishes
- Modern industrial and commercial practice
- Digital design and manufacture
- The requirements for product design and development
- Health and safety
- Protecting designs and intellectual property
- Design for manufacturing, maintenance, repair and disposal
- Feasibility studies
- Enterprise and marketing in the development of products
- Design communication
- Modern manufacturing systems

Designing and Making Principles

Areas covered include:

- Design methods and processes
- Design theory
- How technology and cultural changes can impact on the work of designers
- Design processes

- Critical analysis and evaluation
- Selecting appropriate tools, equipment and processes
- Accuracy in design and manufacture
- Responsible design
- Design for manufacture and project management
- National and international standards in product design

ASSESSMENT

How will my child's work be assessed?

Paper 1

- Written Exam
- Time 2.5 Hours
- Worth 30% A Level

Paper 2

- Written Exam
- Time 1.5 Hours
- Worth 20% A Level
- Non Exam Assessment (NEA)
- Design and Make Project
- 45 Hours Long
- Worth 50% A Level

Through a mixture of short answers and extended responses, the question papers require students to:

- Analyse and Evaluate
- Design decisions and outcomes, including for prototypes
- Wider issues in design and technology
- Demonstrate and Apply Knowledge and Understanding of
- Technical principles
- Designing and making principles

Content for NEA:

This is a design and make project where students will explore a context, design a product, make and evaluate the product. The product context will be set by the exam board.