

**A LEVEL PRODUCT DESIGN**

**(AQA specification)**

This course will introduce you to some of the challenges involved in becoming a product designer. You will be encouraged to take a broad view of design and technology, to develop your capacity to design and make products and to appreciate the complex relationships between design, materials, manufacture and marketing. You will learn a range of technical designing and manufacturing skills and gain an understanding of market influences on product design. You will have access to a dedicated A Level workshop that offers a wide range of tools and process. This includes 3D printing, milling, metal and wood turning, vacuum forming, as well as large selection of hand based tools.

**YEAR 1**

Materials, Components and Application

You will learn about material and component properties through research projects, presentations and focused practical tasks. You will also be researching and studying elements of design history, design philosophy, emerging technologies and will be applying a range of mathematical processes within a design and manufacture context. You will practice applying your knowledge with examination-style questions. The module is assessed by an internally set 90 minute written paper in June.

 Learning Through Designing and Making (Portfolio 50 hours)

You will work with a variety of appropriate materials including CAD/CAM technology in order to respond to a range of design briefs throughout the year. These projects will introduce you to a range of designing and practical skills in preparation for the coursework that is to be completed as part of the second year at A Level.

**YEAR 2**

Unit 3 – Design and Manufacture

You will develop and apply your knowledge of material and component properties and share practice through seminars, presentations, practical tasks and examination-style questioning. The module is assessed by two written papers in June. (50% of the A Level marks)

Unit 4 – Design and Making Practice (Coursework – approx. 60 hours)

You will complete a design portfolio in response to an appropriate design brief of your choosing. A substantial and detailed design project will give you the opportunity to manufacture a high quality product. Previous examples include contemporary furniture, slide guitars, children’s toys, sports equipment and windsurfing safety devices. (50% of the A Level marks)

**Post-study options:** A Level Product Design is widely accepted by universities for a variety of degree courses, notably in engineering (eg mechanical, production/manufacturing, electrical, automotive and aeronautical), product design, industrial design, architecture, and planning and management.

*GCSE requirements:*

*English Language – grade 4*

*Maths – grade 5*

*Grade 5 in a design or art-based subject (preferred but not essential)*