

# *AS / A LEVEL PRODUCT DESIGN*

**Entry requirements - 5 grade A-C at GCSE and Grade C or above in GCSE Design and Technology.**

Design and Technology offers candidates a fantastic opportunity to gain personal satisfaction and a positive experience from working with a wide ranging variety of materials. The practical problem solving processes in this course will encourage independent learning, creativity and innovation.

At AS level students will develop an understanding of a broad range of materials, with emphasis on the life cycle of products, manufacture and final disposal. This specification also considers the broader issues for the designer including the environmental sustainability of products and consumer safety.

**Unit 1** will cover:

- Developing an understanding of the physical and mechanical properties in a broad range of materials and components.
- Methods in which materials and components can be manipulated to manufacture products.
- Computer aided design (CAD) and computer aided manufacture (CAM).
- Ergonomics and anthropometrics, inclusive design and consumer safety.
- The life cycle of products including manufacture, use and functional aspects and final disposal.

**Unit 2** is coursework.

**Unit 4** - At A2 Level, you will use the knowledge and understanding gained in the previous year to tackle a design problem of your own choice. You will produce an e-portfolio to clearly show how you tackled the problem. You will also carry out a study on product and produce a small essay.

You will also carry out a detailed study on a current product. This will give you an extra qualification in addition to your AS.

**Unit 3** - An examination of the following, divided into 3 sections:

- Section A - Materials and Components
- Section B - Design and Market influences
- Section C - Processes and Manufacture