

# DESIGN & TECHNOLOGY: PRODUCT DESIGN

**EXAMINING BOARD:** AQA

**TITLE:** DESIGN & TECHNOLOGY –PRODUCT DESIGN

**ACCREDITATION:**

You can achieve a full range of grades in this GCSE subject from A\*- G (Single Tier Entry).

**NATURE OF THE SUBJECT:**

In this subject you will design, manufacture and analyse a range of contemporary products. During Year 10 you will engage in a number of Design and Make Assignments. These assignments will require you to design and make a product from start to finish. You will use a variety of materials: card, modelling foam, woods, metals, plastics and smart materials to model and manufacture artefacts such as furniture, jewellery, household products, garden furniture and electronic items.

**COURSE CONTENT:**

- Research and investigative skills
- Design history
- Drawing and modelling skills
- Designing
- Computer Aided Design and Manufacture
- Product analysis
- Problem solving
- Project and time planning
- Subject theory work that will include: Design theory, materials theory, production and manufacturing methods, social and economic factors within design and environmental considerations
- Manufacturing
- Analysing and evaluating your own and existing products

**NATURE OF THE WORK:**

Each design project will require you to research, design and manufacture a different product. The design of this product will be your choice. You will be required to justify your design thinking and your design proposals. You will then progress to realise your ideas as a working prototype. Staff will provide as much assistance as possible to ensure that your final product is of a high quality that you can be proud of. Materials will normally be provided free of charge. If your design is large or complex, then we will ask you to contribute to the cost. Health and Safety within all Design and Technology areas is crucial and you will be expected to work in a mature and safe manner at all times.

### **ASSESSMENT:**

Towards the end of Year 10 you will begin a **major project** that is 60% of all available marks. This must be completed during April of your Year 11. Your project will comprise a design folder that is accompanied by a finished item that you have manufactured. At the end of Year 11 you will sit a 2-hour examination in this subject. This examination will test your knowledge of the theory that you will have covered during the two years and it will also test your design skills. This paper carries the remaining 40% of the GCSE marks.

### **CAREER OPPORTUNITIES:**

After the successful completion of this course you may wish to move into the Sixth Form to study Advanced Level Design and Technology (Product Design). This would allow you to move forward to university to study a wide range of subjects. You could consider a career in Product Design, Furniture Design, Architecture, Automotive Design, Manufacturing or Teaching.

### **WHO IS SUITABLE FOR THIS COURSE ?:**

This course is equally suited to girls as it is to boys. If you enjoy designing and making things then you will enjoy Product Design. You will be allowed opportunities to work individually and as a team and the products that you design and make should improve the environment in which you live. You should also enjoy or wish to develop your communication skills as design is all about communicating your ideas. Within Product Design this can be done not only by sketching and drawing, but also through modelling, discussion and the use of Computer Aided Design.

### **FURTHER INFORMATION:**

Please see     Mr. S. Browne – Head of Department  
                      Mr N McBain  
                      Mr. C. Tynan