

TECHNOLOGY AND DESIGN

Introduction

This subject involves numerous areas of practical and theoretical processes. The course allows pupils the choice of a range of Technological topics throughout the two years.

Technology and Design provides opportunities to develop a range of skills suited to the modern world in which we live and work. A range of practical skills are developed which allows quality products to be made using various materials.



What will it be like?

Year 11

Students will complete a range of practical manufacturing products so that skills can be improved for Yr12. (*£5 material charge for manufacturing*) This activity will allow students to research, investigate materials, explore manufacture and look at appropriate finish. Students will also study elements of the topics listed below for examination at the end of year 11.

- Electronics
- Mechanisms
- Pneumatics
- Information and Communication Technology (ICT)
- Computer applications and in particular CAD (SolidWorks)
- Design Work

Students will also have the opportunity to develop design and drawing skills. Computer Aided Design (CAD) and Manufacture (CAM) are being increasingly used within industry, therefore, students will have the chance to see and use this during year 11. Students will use the 3D printer where appropriate.

Year 12

During Year 12 students will have two main focuses:

- 1 Major design and make project, which includes a detailed design folder and the production of a quality product. (*£10 material charge for manufacturing*)
- 2 In addition to this, students will sit their final exam based on product design taught over the years.

Assessment

Unit 1	Technology Core	Written Exam	25% - completed in Year 11
Unit 2	Product Design	Written Exam	25% - completed in Year 12
Unit 3	Design Project	Controlled Assessment Yr. 12	50% - completed in Year 12
		Detailed design folder and production of a quality product	

Career Progression

Being such a broad ranging subject Technology & Design can lead pupils into many careers. It provides a good 'stepping stone' to 'A' Levels and to many other Further Education areas. Careers include: Industry, Design (broad ranging), Electronic and Mechanical Engineering, Maintenance, Service Engineer, Craftsman, Joiner, Plumber, Technician for various jobs, Product designer, Fashion designer.

Technology and Design is offered as an A-Level in Glastry. By following the GCSE and A-Level route in Glastry, options such as architecture, teaching, design and engineering at degree level are possible.