DESIGN AND TECHNOLOGY

COURSE OVERVIEW

This course encourages a practical approach to problem solving, following a series of set briefs, and allows pupils to design and make products with creativity and originality. They will experience a variety of practical disciplines and use a range of materials and techniques. It aims to equip pupils to design and produce products with broad consumer appeal and real market feasibility.

This qualification is modern and relevant, so pupils can learn about contemporary technologies, materials and processes, as well as established practices.

This course places greater emphasis on understanding and applying iterative design processes. Pupils will use their creativity and imagination to design and make prototypes that solve real and relevant problems.

Pupils will develop skills in core technical principles, specialist technical principles and designing and making principles. The practical portfolio will be supported by academic theory.

KNOWLEDGE & SKILLS DEVELOPED

What will I learn?

- You will learn about different resilient materials.
- How to safely use a range of tools and machinery.
- How to cut, shape, form, bend, cast, mould, clean and finish materials.
- How products are made in the real world.
- How to use the laser cutter, 3d printer and computer-controlled router.
- About the work of popular designers and produce products aimed at specific target markets.

Through practical and theory-based lessons pupils will gain confidence in all materials as well as their chosen material specification. They will learn fundamental skills within Design and Technology learning from, wider influences, including historical, social/cultural, environmental and economic factors. Year 11 - Pupils will undertake component 2; design and make task. During the year they will be able to complete a detailed design and make project given by the exam board.

Qualification: **GCSE**

Awarding Body: **AQA**

ASSESSMENT METHOD

Component 1 is written exam worth 50% of the overall grade.
Component 2 is a Non-Exam assessment that is set by the exam board and completed within 30-35 hours project that is worth 50% of the overall grade.

POST 16 OPPORTUNITIES AND CAREERS

Product Design pupils become more confident and skilled in the use of tools and machines and develop real life practical skills that prove valuable in everyday life.

You will have a choice of level 3 courses at Kimberley College. BTEC Level 3 Graphics and BTEC Level 3 Engineering. Recommended complimentary subjects are A Level Maths and Physics.

The logical, creative and practical skills developed provides an excellent grounding for careers in design, the creative industries, engineering and manufacturing. Architecture and IT are also closely associated. You will be set up for a wide range of careers including construction, building services, motor vehicle repair and entrepreneurship.

"Design and Technology, is an amazing subject. Lots of hand on practical which is really fun! You get the chance to get a great understanding of different materials and how they could be used as well as using your own imagination to create prototype models."