



Kimberley  
School

A Level

# DESIGN & TECHNOLOGY

SIXTH FORM  
HUMANITIES

## What is Design and Technology?

A level Design and Technology is seen as a challenging, academic and rigorous A level that will impress a lot of universities and employers.

As a country we have a prestigious UK design and development base for national and international companies. Students in a design related subject are proven to leave this and the next level of study and enter a career that relates to their area of study. A subject that is international and constantly questioning the current, so are you the future?

A-level Design and Technology is crucial for those students wanting to study courses such as engineering, product design, materials research and development, architecture, interior designer, product developer, systems analysis, scientific studies of human factors and a range of apprenticeships to name a few.

## Who is it for?

The course is aimed at pupils who have gained a 5 or above at GCSE in the following Design and Technology subjects:

- Resistant Materials
- Graphic Products
- Textiles

The course provides sound progression from GCSE on to further study. It focuses on the design and manufacture of products whilst offering a relevant and interesting content for study with theoretical knowledge related to design and making activities integrated into lessons.

The NEA allows students to work with a client throughout the project. Students study historical, social, cultural, environmental and economic influences on Design and Technology and put their learning into practice by designing and making products. Students develop an understanding of what it is like to be a designer and maker. Home learning experiences provide consolidation of knowledge. Wider reading suggestions expand their design awareness

# What will I study?

Each teacher delivers one side of the course. The two sides dovetail as the course develops. The content is taught in year 12 and 13 and develops in depth as the course progresses.

## **Technical principles. TP**

- Materials and their applications
- Performance characteristics of materials
- Enhancement of materials
- Forming, redistribution and addition processes
- The use of adhesives and fixings
- The use of finishes
- Modern industrial and commercial practice
- Efficient use of materials
- Digital design and manufacture
- The requirements for product design and development
- Health and safety
- How technology and cultural changes can impact on the work of designers

## **Designing and making principles. DMP**

- Design methods and processes
- Design theory
- How technology and cultural changes can impact on the work of designers
- Product life cycle
- Design processes
- Critical analysis and evaluation
- Selecting appropriate tools, equipment and processes
- Accuracy in design and manufacture.
- Responsible design
- Design for manufacture and project management
- Feasibility studies
- Enterprise and marketing in the development of products
- Design communication
- Design processes
- National and international standards in product design

The course is made up of:

Throughout the course your progress will be assessed through homework tasks, assignments and through topic specific tests and mock examinations.

Formal assessment at the end of year 13 will comprise of external examinations as follows;

**Paper 1 – 1 h 30 mins (25% weighting) – DMP**

**Paper 2 – 2 hr 30 mins (25% weighting) – TP**

**Controlled Assessment - (50% Weighting) – NEA**

The exams will consist of some multiple choice, short answer questions and some longer answer questions. There is cross over in some of the content. Overall there will be Maths questions that will focus around a Design and Technology context to GCSE level 5. As part of the A-level course we cover and develop the skills required for this.

## Possible careers with Design Technology

*Architecture  
Engineering  
Product Design  
Industrial Design  
Graphic Design  
And many more... Check out the A4 career options sheet!*

For more information, please see Mr Bull or Mr Marriott.