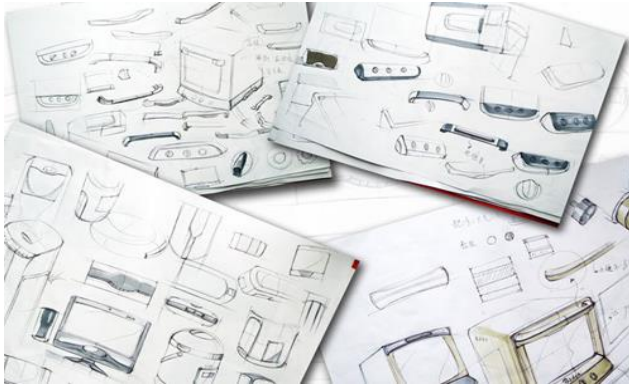


A Level Design & Technology - Product Design



Entry Criteria: You will need to achieve a Grade 4 or above from your GCSE Design and Technology course. You must also have been entered for the Higher GCSE Mathematics paper. Other qualifications that would be helpful are Art and Business Studies.

Coursework/Examination Requirements:

One written examination worth 50% and one coursework assessment worth 50%.

Awarding Body/Specifications: Pearson Edexcel GCE A Level Design and Technology (Product Design).

Advanced Level (A Level): This course is designed to equip students with the confidence to innovate and produce creative design solutions as they develop their own design brief with a client/end user. Students will be able to recognise design needs and develop an understanding of how current global issues, including integrating technology, impact on today's world. Students will increasingly acquire subject knowledge in design and technology and develop an in-depth knowledge and understanding of materials, components and processes associated with the creation of products. Students will work collaboratively to develop and refine their ideas. **The following units will be covered on this course:**

Unit 1

Written examination: 2 hours and 30 minutes. Topics 1 - 12 will be assessed.

Unit 1: Materials

Unit 2: Performance characteristics of materials

Unit 3: Processes and techniques

Unit 4: Digital technologies

Unit 5: Factors influencing the development of products

Unit 6: Effects of technological developments

Unit 7: Potential hazards and risk assessment

Unit 8: Features of manufacturing industries

Unit 9: Designing for maintenance and the cleaner environment

Unit 10: Current legislation

Unit 11: Information handling, Modelling and forward planning

Unit 12: Further processes and techniques.

Unit 2 Non-examined assessment (NEA)

There are four parts to the assessment:

Unit 1: Identifying and outlining possibilities for design

Identification and investigation of a design possibility, investigation of client/end user needs, wants and values, research and production of a specification

Unit 2: Designing a prototype

Design ideas, development of design idea, final design solution, review of development and final design and communication of design ideas

Unit 3: Making a final prototype

Design, manufacture and realisation of a final prototype, including tools and equipment and quality and accuracy

Unit 4: Evaluating own design and prototype

Testing and evaluation

Advanced Subsidiary (AS): There is not an option to study this as an AS Level equivalent qualification as this is a two-year course.

Progression: Students can progress from this qualification to tertiary education and/or work-based study including product design, engineering and architecture. Alternatively, further training in the design, creative, engineering and/or manufacturing industries or employment in a relevant sector.

Opportunities: Students will have use of a wide range of equipment, machinery and resources within a well-resourced department.