Design and Technology: Product Design

This course is an A Level Course.

MINIMUM SUBJECT ENTRY REQUIREMENTS (in addition to the general 6TH form minimum entry requirements of 5 x grade 4 at GCSE/equivalent or above including maths and English): GCSE grade 4 in Design and Technology (any specialism). Students who have a strong background in Art will also be considered.

In this course you can expect to develop your creative abilities by advancing your practical skills, designing skills and theoretical knowledge. You will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put your learning into practice by producing products of your choice in your chosen specialist material area.

Exam Board Information:
EdExcel: Specification 9DT0
QAN code: 603/0697/X
50% coursework and 50% examination (1 paper)

Component 1: Principles of Design and Technology.
Component 2: Independent Design and Make Project

Component 1 Topics:
Topic 1: Materials
Topic 2: Performance characteristics of materials
Topic 3: Processes and techniques
Topic 4: Digital technologies
Topic 5: Factors influencing the development of products
Topic 6: Effects of technological developments
Topic 7: Potential hazards and risk assessment
Topic 8: Features of manufacturing industries
Topic 9: Designing for maintenance and the cleaner environment
Topic 10: Current legislation
Topic 11: Information handling, Modelling and forward planning
Topic 12: Further processes and techniques.

PATHWAYS:

UNIVERSITY COURSES	APPRENTICESHIPS	WORLD OF WORK
3D Design and Craft Aerospace Engineering, Manufacturing Engineering, Automotive Engineering, Architecture Computer aided Engineering Construction Sustainable Design Creative Technology Design and Technology Electronic Engineering Engineering Design Furniture Industrial Design Interior Design Materials Science and Energy Engineering Mechanical Engineering Product Design Robotics and Automation Sustainable Product Design	Some of the **Advanced** apprenticeships available are: Automotive Parts Medical Engineering Fire Testing Technician Computer Aided Design Quality Engineering Production Engineer Mechanical Engineering RAF apprenticeships: Avionics, Survival Equipment, Aircraft technician, General Technician. Mechanical Engineering: 3M UK plc. **Higher** Apprenticeships are available in the following: Automotive Engineering Technology Retail Electrical Engineering Mechanical Engineering Communication Infrastructure	This course will give you the confidence to succeed in a number of careers, especially those in the creative, engineering or manufacturing industries. To enter this field you will generally need further on the job training. Creative Art worker Junior Book Cover Designer Junior Graphic Designer Junior CAD operator Trainee Quantity Surveyor D&T School Technician Trainee field operative vacancies involving practical skills. The manufacturing sector is the 6th biggest employer in the UK, employing over 3 million people.

For further information or to ask questions, please contact: Mr O Pigott (Leader of Learning for Art, Design and Technology) or Mrs Chadwick
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