GCSE Design Technology: Engineering

Overview

Learners will gain in-depth knowledge of engineering processes and practices. This is underpinned by a wider understanding of skills, technologies, materials, and the influences of social, cultural, environmental and economic factors on engineering.

What will I study?

The course combines practical skills, supported by theoretical learning. Topics include the properties of materials such as ferrous metals and polymers, electronic systems, and the production process.

Learners will also investigate and analyse problems that they will use to inform the development, communication and strategies surrounding practical projects, including identifying and understanding user needs, creating prototypes, and addressing challenges.

Assessment

There are two assessments for this course - a written examination, and a practical coursework based project.

Units	Content/Assessment Type	Weight
Unit 1: Design & Technology in the 21st Centry	 2 hour written examination. Questions assess knowledge and understanding of engineering 	50%
Unit 2: Design & Make Task	 Non-examined assessment. Contextual challenge set by exam board. Identify, investigate, analyse and outline design possibilities. Design and make prototypes and evaluate their fitness for purpose. 	50%

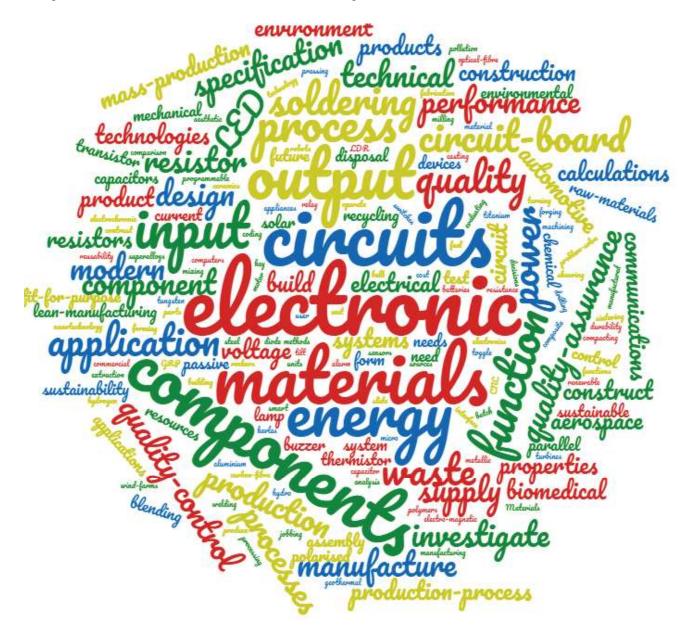
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Where can GCSE DT: Engineering take me?

GCSE Engineering provides learners with the opportunity to begin exploring the world of engineering, and the different technologies it encompasses, as well as, engineering materials, mechanics, electronics, computer control, plastic and metalwork.

Through the use of technologies such as CAD and CAM software, 3D printing, laser cutting, learners are prepared for careers and further education courses in a number of areas of engineering- for example, civil, structural, electrical and mechanical engineering.

Keywords from the course description:



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