# **Design Technology - Revision Information**

Full Course Name: Eduqas GCSE Design Technology

Full Course Code: C600QS

Type of Qualification: GCSE

# **Examination Structure (Full Course):**

Unit Name	Coursework / Controlled Assessment / Examination	Date range / Deadline(s) (Subject to change)	Content in this unit	Percentage of course	Useful links
NEA coursework component	Controlled assessment	June I <sup>st</sup> – February 28 <sup>th</sup>	Designing and making to solve a contextual challenge	50%	
					ENGINEERING - DESIGN AND TECHNOLOGY (technologystudent.com)
Written exam	Examination	May/June Yr 11	Design and Technology in the 21 <sup>st</sup> Century	50%	
					ENGINEERING - DESIGN AND TECHNOLOGY (technologystudent.com)

# If you are going to purchase a revision guide, this is what we suggest:

My Revision Notes: WJEC Eduqas GCSE (9-1) Design and Technology My Revision Notes: WJEC Eduqas GCSE (9-1) Design and Technology: Amazon.co.uk: Fawcett, Ian, Howells, Jacqui, Knight, Andy, Walker, Chris: 9781510471696: Books







## Year 10 Mock Information (Subject to Change):

All students will be expected to answer questions based on the following:

Carbon footprint - Product lifecycle - Sustainability and environmental responsibilities for the designer and consumer - Ability to look at a picture, even if you do not know what the material is called and work out what it should do then comment on that. In particular, Technical materials used in sports clothing. – Nomex – Kevlar – Polymorph - Uses of smart materials - Basic circuit components and symbols including battery, switch, bulb, LED - Know what an LDR (light dependant resister) is and what it does - Mechanical advantage with levers - Velocity ratio - Parts of a lever – load, effort and fulcrum – Microprocessors – Microcontrollers - How paper thickness / weight is displayed - Corrugated card - An understanding of structure and how shape gives strength to a material - Materials and their properties - MDF (medium density fibreboard), why / where it is used. Properties and limitations - Properties of natural fibres and textiles - Primary and secondary research. What the difference is, examples and advantages of both. - Scales of production – Continuous, batch, one off. Cell production - Anthropometrics and use of anthropometric data. **Wood and manufactured boards –** Laminating - Wood based materials - Wood finishes and methods of application - Life cycle analysis - Batch production – **Metals -** Ferrous and non-ferrous metals - Structure and shape and how this affects the strength - Continuous production - Life cycle analysis

## Year II Mock I Information (Subject to Change):

#### All students answer section A. You will have questions relating to

Smart materials - Biomimicry and fabric - Renewable energy - Benefits and limitations of wind up technology as a power source - The impact of Technological advances on society - Types of motion: Rotary, Oscillating, Reciprocating, Linear - Cogs, gears and ratios - Revs per minute (RPM) - Parts of a lever Fulcrum, force (effort), load - Feedback in a system - What a thermistor does – LEDs - Thermoforming plastics - Properties of acrylic - Ferrous and nonferrous metals - Denim - Paper and card -Finishing techniques -Laser cutting – Safety considerations Consumer protection and legislation surrounding fitness for purpose

#### Natural and manufactured timber

Ferrous and nonferrous metals

# Year II Mock 2 Information (Subject to Change):

All students will be expected to answer questions based on the following:

Logos and symbols - Cams and how a follower will track the shape of a Cam - Leavers and how you would identify the **load**, **effort** and **fulcrum** - Recycling and the benefits it brings society - Composite materials - Properties of materials - Material sources: natural, synthetic - Parallel and serial circuits - How circuit diagrams are drawn - Types of wood based manufactured board and what they look like / how they are constructed - Common types of plastics used for bottles - Fabric construction: the difference between knitted and woven and what a warp and weft are - Properties and differences between silk and polyester - The sizes of paper - Disadvantages / issues associated with using recycled materials - Understand types and benefits of using CAM machines - Advantages, issues and different types of CAD software

#### Natural and manufactured timber

Ferrous and nonferrous metals

## Link to Specification:

https://www.eduqas.co.uk/media/25tlhhbw/gcse-design-and-technology-specification.pdf



Other useful links: Eduqas Digital Educational Resources

