Design Technology	
Examination Board	**Code**
Eduqas	**603/1121/6**

Outline of the Course

Topics studied in Year 10	Topics studied in Year 11
Technical Knowledge and Understanding (exam preparation) ● Design Technology and our World ● Smart Materials, Composites and Technical Textiles ● Electronic Systems and Programmable Components Mechanical Components and Devices ● Materials and their Working Properties *Designing and Making (coursework preparation)* ● 3D CAD and CAM ● Drawing Skills, Modelling, Iterative Design ● Developing a Prototype ● Mock NEA (coursework)	● NEA - Investigating Design Possibilities ● NEA - Developing a Design Brief and Specification ● NEA - Generating and Developing Design Ideas ● NEA - Manufacturing a Prototype ● NEA - Evaluating Design Decisions and Prototypes ● Theory knowledge and technical skills recall and retrieval

What You Will Learn?

Design and Technology offers a unique opportunity for you to solve real problems by designing and making products. You will be challenged in your knowledge and understanding in areas of Maths, Science and ICT as well as being asked to be creative and inventive through drawing and practical making skills.

Through studying GCSE Design and Technology, you will be prepared to participate confidently and successfully in an increasingly technological world and be aware of, and learn from, wider influences on design and technology, including historical, social/cultural, environmental and economic factors.

Technical Knowledge and Understanding
There are 5 key topic areas of knowledge and understanding:

- Design Technology and our World

emerging technologies, environmental issues, societal impacts, and the needs of both current and future generations.

- Smart Materials, Composites and Technical Textiles

developments in materials technology and how these impact on the design and use of products.

- Electronic Systems and Programmable Components

the importance of electronic and programmable components for both product designers and end users, how these components are integrated into everyday products.

- Mechanical Components and Devices

the importance of mechanical components and devices for both product designers and end users, how these components are integrated into everyday products.

- Materials and their Working Properties

Properties of various materials, including their sources, uses, and applications in different products.

Designing and Making
You will be required to show understanding and practical skills in the following areas:

- Understanding user needs
- Writing a design brief and specification
- Developing and communicating design ideas
- Investigating the work of others
- Using design strategies
- Independent problem solving
- Selecting and working with materials and components
- Marking out and measuring
- Using specialist tools and equipment

How Will I Be Assessed?

Component 1: Exam
Design and Technology in the 21st Century
A mix of short answer, structured and extended writing questions assessing your knowledge and understanding of:

- Technical knowledge and understanding
- Designing and making

In addition, you will be assessed on your ability to:

- Analyse and evaluate design decisions and wider issues in design and technology.

Component 2: Design and make project

- A sustained design and make task, based on a contextual challenge set by the exam, assessing your ability to:
- Identify, investigate and outline design possibilities
- Think innovatively and creatively
- Design and make prototypes
- Analyse and evaluate design decisions and wider issues in design and technology.
- Work independently and creatively

Mark Breakdown	Website Links
Component 1: 100 marks – 50% of qualification **Written examination:** 2 hours **Component 2:** 100 marks – 50% of qualification **Non-exam assessment:** Approximately 35 hours	https://www.eduqas.co.uk/qualifications/design-and-technology-gcse/#tab_keydocuments

Key Dates

Component 1: June Year 11

Component 2: Sept – March Y11

Further Information

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What can I do after I have completed the course?		
GCSE Design Technology provides students with an extensive range of skills, preparing them for a large range of different pathways from apprentices to higher education. It will provide a direct pathway to A Level Design Technology courses including Product Design and Engineering. Students can go on to further courses and careers in the following columns:	Product Design Engineering – all strands Architecture Marketing & Promotion Prop and Set Design Interior Design Packaging Design Environmental Design and	Planning Advertisement Product Buyer Building Technician Fashion Design Armed Services Careers in Radio and Television Carpenter and Joiner