

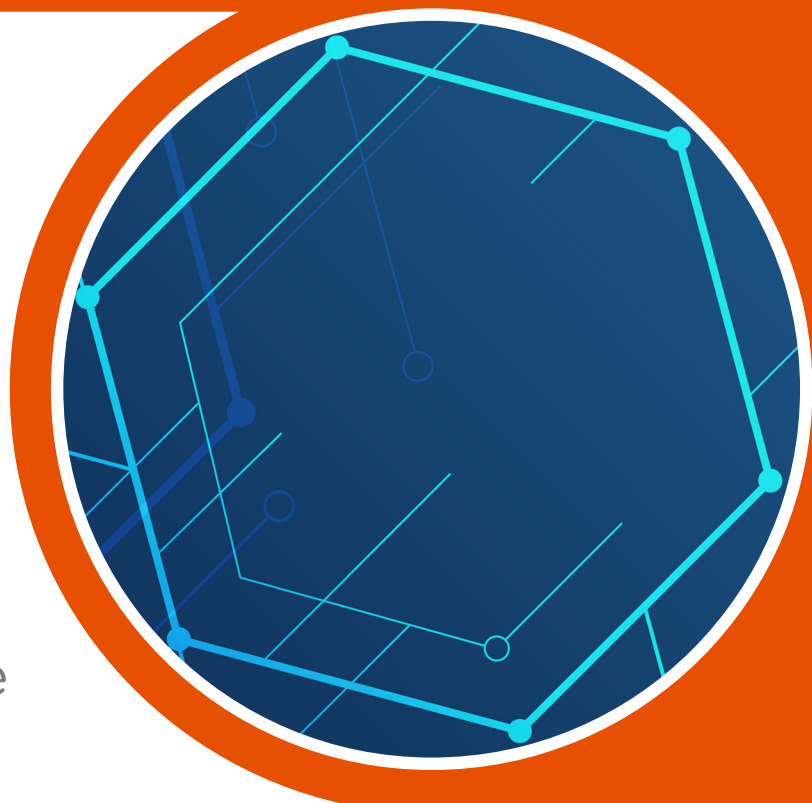
Thrive with Eduqas.

Because every teacher is unique, we'll be with you every step of the way.

Switch to us and thrive!

GCSE Design and Technology

Your step-by-step guide



CONTENTS

- Switching is simple 2
- The support you need 3
- GCSE Design and Technology 4
- Summary of assessment 5
- Helping you make the switch 6

Switching is simple

Switching to Eduqas could be the best move you make.

You'll gain access to an unbeatable range of free teaching resources, and our team of subject specialists are on hand to give you all the help and advice you need.

Whether you're with AQA, OCR or Pearson (Edexcel), you can rest assured that switching to Eduqas is straightforward.

Simply follow this guide, compare our specifications, and make the switch!

1

Follow this switcher guide for your subject

2

Register your interest and receive a printed copy of your [chosen specification\(s\)](#)

3

Visit [your qualification page](#) to access the materials you need to begin teaching our specifications

4

Visit our [Digital Resources website](#) for free resources that can be used as classroom aids and as revision tools

5

Contact [our subject specialists](#) for subject specific queries, practical advice and guidance

6

Your Exams Officer will need to register [your centre](#), if your centre is not already registered with us

7

You will be granted access to our [Secure Website](#) which hosts a wealth of exclusive resources

We are here to support you:

If you have a question, simply contact our Design and Technology team who will offer friendly advice and guidance:



Jason Cates
Subject Officer -
Design and Technology

designandtechnology@eduqas.co.uk
029 2240 4303

The support you need

REGIONAL SUPPORT TEAM

Whether you're a teacher, lecturer, exams officer or head of department, our Regional Support Team is on-hand to make sure you receive all the support and guidance you need.

We cover every part of England and can provide face-to-face and online advice at a time which is convenient to you.

REASONS WHY YOU SHOULD CONTACT US

- All of our regional representatives are former teachers, and therefore understand exactly what kind of support you need to get the most out of your classroom experience.
- Support can be face-to-face or online and at a time and location which suits you.
- With their extensive knowledge of our qualifications, you'll get the insight you need to help you deliver our qualifications with confidence.
- You'll receive practical advice on the best resources for your subject including our extensive range of digital resources, Question Bank and Online Exam Review.
- We also offer support for teachers new to a particular subject or thinking about joining us, in which we run through assessment structure, exam papers, and where to find various resources you will need for teaching.
- Support from our team - including visits - **is FREE!**

MEET THE TEAM

Get in contact today and discover how our team can support you and your students. To book a visit or to find out more, please visit [our Regional Support Team webpages](#).

WE'RE ON HAND TO SUPPORT YOU AND OFFER GUIDANCE ON OUR QUALIFICATIONS AND RESOURCES.



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GCSE Design and Technology

WHY CHOOSE US?

If you would like to work with a team which understands you and your students' needs, switching to Eduqas could be the best move you make:

- We provide detailed guidance for teaching resources, to support teachers in the delivery of our GCSE Design and Technology specification.
- We offer face to face Professional Learning sessions delivered by teams of subject specialists.
- A wide range of free digital resources to support delivery of the examination.
- Access to support from subject specialists.

Free tailored digital resources

We have created a wealth of free digital resources to support our qualifications. They have been developed to enhance learning, stimulate classroom discussion, and encourage student engagement. [Access our resources today.](#)

For me, the access to high quality support from the Subject Officer and the pragmatic and realistic nature of the exam board made the switch to Eduqas inevitable when the new specifications came out. The examination board's expectations are high but they provide the clarity and support so that we can reach those standards. The moderation visits we've experienced at A level have always been very positive and we are looking for the same experience with our GCSE classes.

Mr Andrew Duffey

Head of Design Technology, Engineering and Computing

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Summary of assessment

The specification content and assessment requirements are designed to ensure learners develop an appropriate breadth and depth of knowledge and understanding in design and technology.

Technical principles: Learners are required to study all of the content in the five areas listed under core knowledge and understanding and at least one of the topic areas identified in the in-depth knowledge and understanding as illustrated below:

Technical principles

Core knowledge and understanding

- Design and technology and our world
- Smart materials
- Electronic systems and programmable components
- Mechanical components and devices
- Materials

Plus at least one from:

In-depth knowledge and understanding

- Electronic systems, programmable components and mechanical devices
- Papers and boards
- Natural and manufactured timber
- Ferrous and non-ferrous metals
- Thermosetting and thermoforming plastics
- Fibres and textiles

Designing and making principles

Core knowledge and understanding

Plus at least one from:

In-depth knowledge and understanding

- Electronic systems, programmable components and mechanical devices
- Papers and boards
- Natural and manufactured timber
- Ferrous and non-ferrous metals
- Thermosetting and thermoforming plastics
- Fibres and textiles

The subject content for GCSE Design and Technology will be assessed in the written examination and non-exam assessment (NEA).

Component 1: Design and Technology in the 21st century

Written examination: 2 hours
50% of qualification
100 marks

A mix of short answer, structured and extended writing questions assessing candidates' knowledge and understanding of:

- Technical principles
- Designing and making principles

Along with their ability to:

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

Component 2: Design and make task

Non-exam assessment: 35 hours approximately
50% of qualification
100 marks

Helping you make the switch

Comparing specifications

Eduqas	OCR	AQA	Pearson
Technical principles: Core knowledge and understanding			
Design and technology and our world	✓	✓	✓
The impact of new and emerging technologies	✓	✓	✓
The critical evaluation of emerging technologies; ethics and the environment	✓	✓	✓
How energy is generated and stored in order to choose and use appropriate sources to make products and to power systems	✓	✓	✓
Smart materials, composites and technical textiles	✓	✓	✓
Electronic systems and programmable components	Design engineering	✓	✓
The use of programmable components in products	✓	✓	✓
Mechanical components and devices	✓	✓	✓
Materials	✓	✓	✓
<ul style="list-style-type: none"> • Papers and boards 	✓	✓	✓
<ul style="list-style-type: none"> • Natural and manufactured timber 	✓	✓	✓ Timbers
<ul style="list-style-type: none"> • Ferrous and non-ferrous metals 	✓	✓	✓ Metals
<ul style="list-style-type: none"> • Thermoforming and thermosetting polymers 	✓	✓	✓ Polymers
<ul style="list-style-type: none"> • Natural, synthetic, blended and mixed fibres, and woven, non-woven and knitted textiles. 	✓	✓	✓ Textiles
Technical principles: In-depth knowledge and understanding			
Electronic systems, programmable components and mechanical devices	Design engineering	✓	Systems
Sources and origins of materials , ecological and social footprint	✓	✓	✓
Influences on materials selection	✓	✓	✓
Impact of forces and stresses	✓	✓	✓
Stock forms , types and sizes	✓	✓	✓
Processes used to manufacture, scales of production	✓	✓	✓
Specialist techniques and processes for manufacture	✓	✓	✓
Surface treatments and finishes	✓	✓	✓
Papers and board	✓	✓	✓
Sources and origins of materials , ecological and social footprint	✓	✓	✓
Influences on materials selection	✓	✓	✓
Impact of forces and stresses	✓	✓	✓
Stock forms , types and sizes	✓	✓	✓
Processes used to manufacture, scales of production	✓	✓	✓
Specialist techniques and processes for manufacture	✓	✓	✓
Surface treatments and finishes	✓	✓	✓

Helping you make the switch

Comparing specifications

Eduqas	OCR	AQA	Pearson
Natural and manufactured timber	✓	✓	Timbers
Sources and origins of materials, ecological and social footprint	✓	✓	✓
Influences on materials selection	✓	✓	✓
Impact of forces and stresses	✓	✓	✓
Stock forms , types and sizes	✓	✓	✓
Processes used to manufacture, scales of production	✓	✓	✓
Specialist techniques and processes for manufacture	✓	✓	✓
Surface treatments and finishes	✓	✓	✓
Ferrous and non-ferrous metal	✓	✓	Metals
Sources and origins of materials , ecological and social footprint	✓	✓	✓
Influences on materials selection	✓	✓	✓
Impact of forces and stresses	✓	✓	✓
Stock forms , types and sizes	✓	✓	✓
Processes used to manufacture, scales of production	✓	✓	✓
Specialist techniques and processes for manufacture	✓	✓	✓
Surface treatments and finishes	✓	✓	✓
Thermoforming and thermosetting polymers	✓	✓	Polymers
Sources and origins of materials, ecological and social footprint	✓	✓	✓
Influences on materials selection	✓	✓	✓
Impact of forces and stresses	✓	✓	✓
Stock forms , types and sizes	✓	✓	✓
Processes used to manufacture, scales of production	✓	✓	✓
Specialist techniques and processes for manufacture	✓	✓	✓
Surface treatments and finishes	✓	✓	✓
Natural, synthetic, blended and mixed fibres, and woven, non-woven and knitted textiles.	✓	✓	Textiles
Influences on materials selection			
Impact of forces and stresses			
Stock forms , types and sizes			
Processes used to manufacture, scales of production			
Specialist techniques and processes for manufacture			
Surface treatments and finishes			
Surface treatments and finishes			

Helping you make the switch

Comparing specifications

Eduqas	OCR	AQA	Pearson
Designing and making principles			
Develop and apply core knowledge, understanding and skills			
Context used as a starting point to inform design briefs	✓	✓	✓
Client and user needs	✓	✓	✓
Writing a design brief and specification	✓	✓	✓
Environmental, social and economic factors	✓	✓	✓
Iterative process of design	✓	✓	✓
The work of past and present professionals: • Five listed	✓ None listed	Minimum of two designers and two companies from the lists supplied	8 designers listed
The use of different design strategies	✓	✓	✓
Develop, communicate and justify design ideas	✓	✓	✓
Design and develop a prototype product	✓	✓	✓
Decision making and responding to feedback	✓	✓	✓
Develop and apply in-depth knowledge, understanding and skills			
Selecting and working with materials to make a prototype	✓	✓	✓
Appropriate marking out methods	✓	✓	✓
Use of specialist tools and equipment	✓	✓	✓
Use of specialist techniques and processes	✓	✓	✓
Use of appropriate surface treatment and finishes	✓	✓	✓

Written examination

Eduqas	OCR	AQA	Pearson
Component 1	Component 01	Paper 1	✓
Written examination 2 hours	✓	✓	✓ 1 hr 45 mins
50% qualification (9 – 1)	✓	✓	✓
100 marks • Section A: Core 55, in-depth 20 marks • Section B: In-depth 25 marks	✓ • Section A: Core 55 marks • Section B: In-depth 45 marks	✓ • Section A: Core Technical principles 20 marks • Section B: Specialist technical principles: 30 marks • Section C: Designing and making principles: 50 marks	✓ • Section A: Core 40 marks • Section B: Materials categories 60 marks
15% mathematical skills in D&T context	✓	✓ 10% science	✓

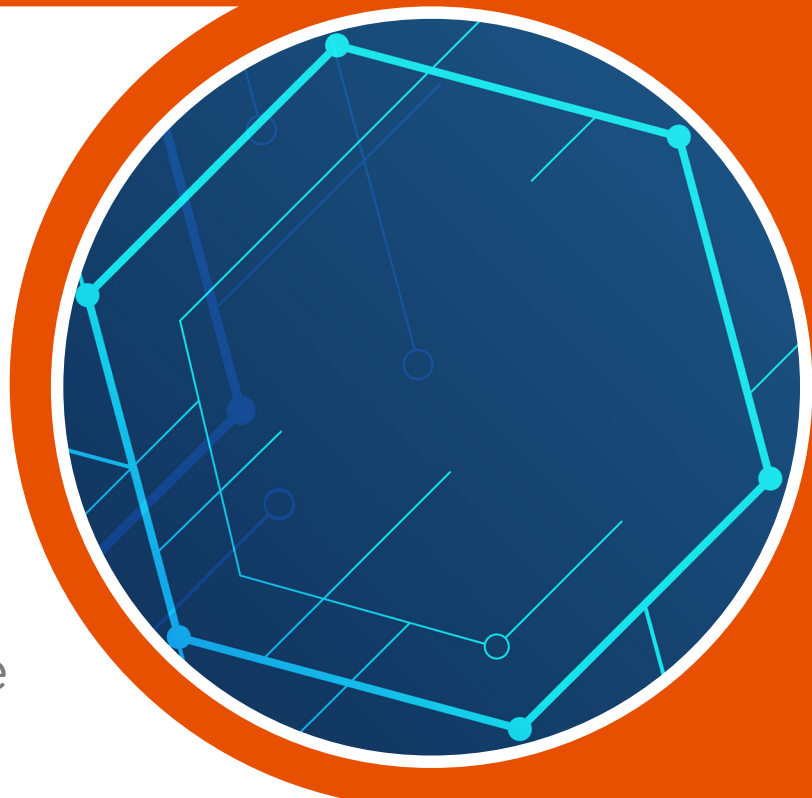
Helping you make the switch

(NEA) Non Exam Assessment

Eduqas	OCR	AQA	Pearson
Component 2	Component 02 or 03	NEA	✓
Contextual challenge set by Eduqas on June 1st in the calendar year preceding the award	✓	✓	✓
<ul style="list-style-type: none"> • NEA: approximately 35 hours 	Approx. 40 hours	Approx. 30 – 35 hours	Not specified
<ul style="list-style-type: none"> • 50% of qualification (9 – 1) 	✓	✓	✓
<ul style="list-style-type: none"> • 100 marks 	✓	✓	✓
Identifying and investigating design possibilities. (10 marks)	Strand 1: Explore (20 marks)	✓	✓
Developing a design brief and specification. (10 marks)	Strand 2: Create (24 marks)	Generating design ideas (20 marks)	
Generating and developing design ideas. (30 marks)	Strand 3: Create - design communication (16 marks)	Developing design ideas (20 marks)	Design (42 marks)
Manufacturing a prototype. (30 marks)	Strand 4: Final prototype (20 marks)	Realising design ideas (20 marks)	Make (36 marks)
Analysing and evaluating design decisions and prototypes. (20 marks)	✓	✓	Evaluate (6 marks)

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