

YOUR STEP- BY-STEP GUIDE TO SWITCHING TO EDUQAS

GCSE DESIGN AND TECHNOLOGY

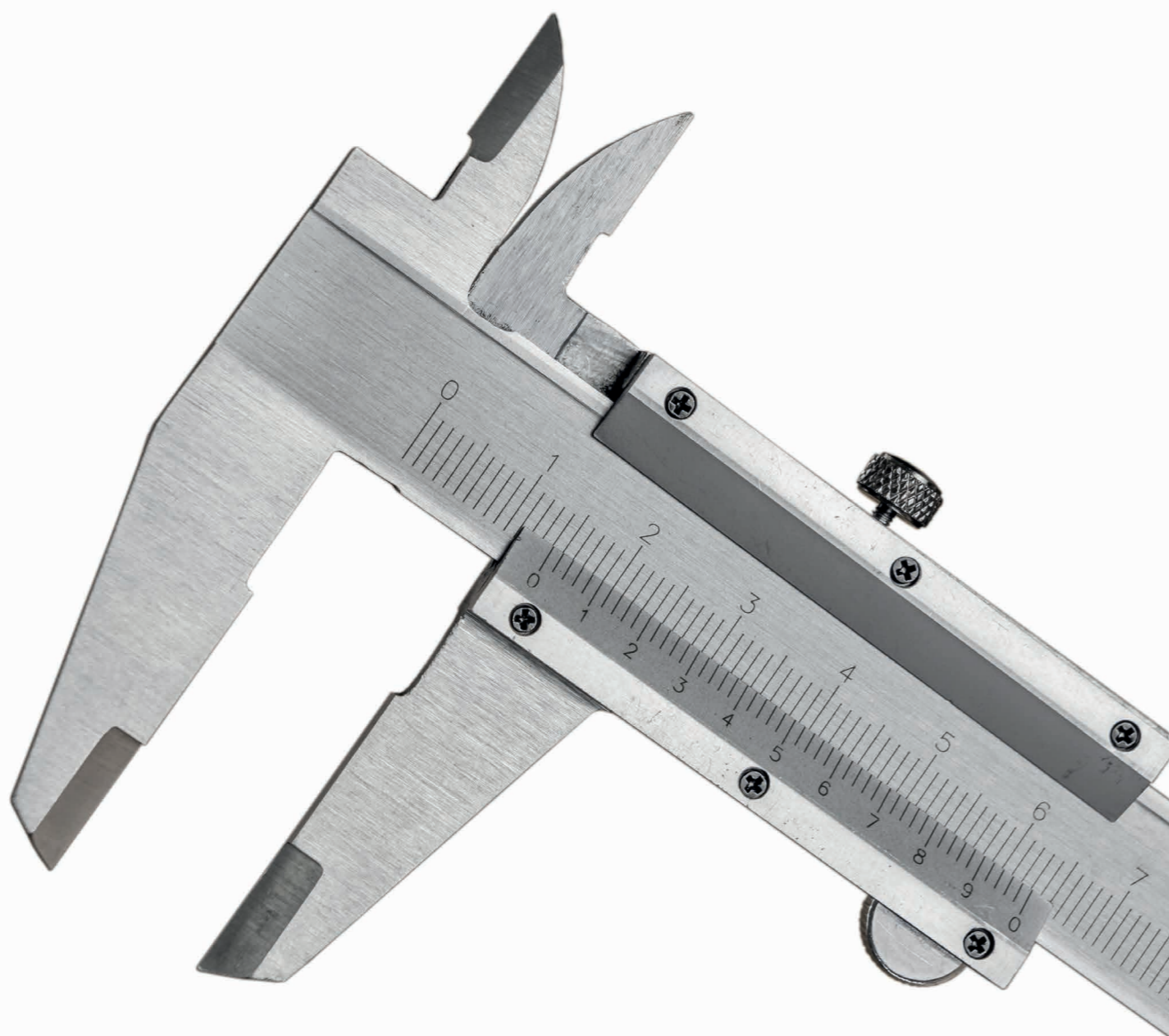


GCSE DESIGN AND TECHNOLOGY WITH EDUQAS

WHY CHOOSE US?

If you would like to work with a team which understands your 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 CPD sessions delivered by teams of subject specialists
- A wide range of Digital resources to support delivery of the examination
- Access to support from subject specialists



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 (a to f)** identified in the in-depth knowledge and understanding as illustrated below:

Technical principles		
Core knowledge & understanding		In-depth knowledge & understanding
<ul style="list-style-type: none"> • Design and technology and our world • Smart materials • Electronic systems and programmable components • Mechanical components and devices • Materials 	Plus at least one from	<ul style="list-style-type: none"> a. Electronic systems, programmable components & mechanical devices b. Papers & boards c. Natural & manufactured timber d. Ferrous & non-ferrous metals e. Thermosetting & thermoforming plastics f. Fibres & textiles
Designing and making principles		
Core knowledge & understanding	plus	In-depth knowledge & understanding (in relation to at least one of a to f above)
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 (100 marks)	50% of qualification
A mix of short answer, structured and extended writing questions assessing candidates' knowledge and understanding of: <ul style="list-style-type: none"> • Technical principles • Designing and making principles 	Along with their ability to: <ul style="list-style-type: none"> • Analyse and evaluate design decisions and wider issues in design and technology

Component 2: Design and make task

Non-exam assessment: approximately 35 hours (100 marks)	50% of qualification
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MAKE THE SWITCH TO A BOARD THAT WILL SUPPORT YOU

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!

MAKING THE SWITCH

Switching to Eduqas is simple, just follow these quick and easy steps:

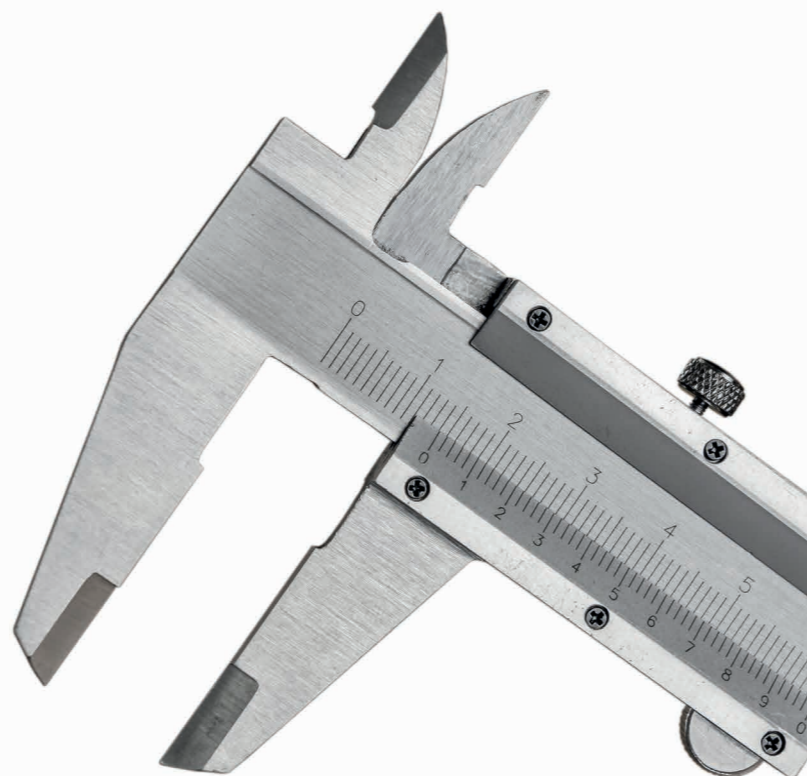
1. Follow our switcher guide for your subject.
2. Register your interest at www.eduqas.co.uk/switch and receive a printed copy of your chosen specification(s).
3. Visit your qualification page at www.eduqas.co.uk/qualification, to access the materials you need to begin teaching our specifications.
4. Visit our Digital Resources Website (resources.eduqas.co.uk), 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. Once registered, your Exams Officer will be able to provide you with access to our Secure Website (www.wjecservices.co.uk), which hosts a wealth of resources that are not available elsewhere.

WE'RE HERE TO SUPPORT YOU

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



STEVE HOWELLS
Subject Officer -
Design And Technology
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029 2240 4303



HELPING YOU MAKE THE SWITCH - COMPARING SPECIFICATIONS

GCSE DESIGN AND TECHNOLOGY

Eduqas	OCR	AQA	Pearson (Edexcel)
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			
• Papers and boards	✓	✓	✓
• Natural and manufactured timber	✓	✓	✓ Timbers
• Ferrous and non-ferrous metals	✓	✓	✓ Metals
• Thermoforming and thermosetting polymers	✓	✓	✓ Polymers
• 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 & 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 boards	✓	✓	✓
• 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	✓	✓	✓

GCSE DESIGN AND TECHNOLOGY

Eduqas	OCR	AQA	Pearson (Edexcel)
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
• 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			

GCSE DESIGN AND TECHNOLOGY

Eduqas	OCR	AQA	Pearson (Edexcel)
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 sand finishes	✓	✓	✓

Written Examination

Eduqas	OCR	AQA	Pearson (Edexcel)
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	✓

(NEA) NON EXAM ASSESSMENT

Eduqas	OCR	AQA	Pearson (Edexcel)
Component 2	Component 02 or 03	NEA	✓
Contextual challenge set by Eduqas on June 1st in the calendar year preceding the award	✓	✓	✓
• NEA: approximately 35 hours	Approx. 40 hours	Approx. 30 – 35 hours	Not specified
• 50% of qualification (9 – 1)	✓	✓	✓
• 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)

THE SUPPORT YOU NEED

FREE TAILORED DIGITAL RESOURCES

We've 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 at resources.eduqas.co.uk

REGIONAL SUPPORT

Our Regional Support Team are also on hand to offer free support in the delivery of our qualifications. They can also give you face-to-face advice on our range of qualifications, online resources, CPD and curriculum developments. To book a visit or to find out more, please visit www.eduqas.co.uk/RegionalSupportTeam



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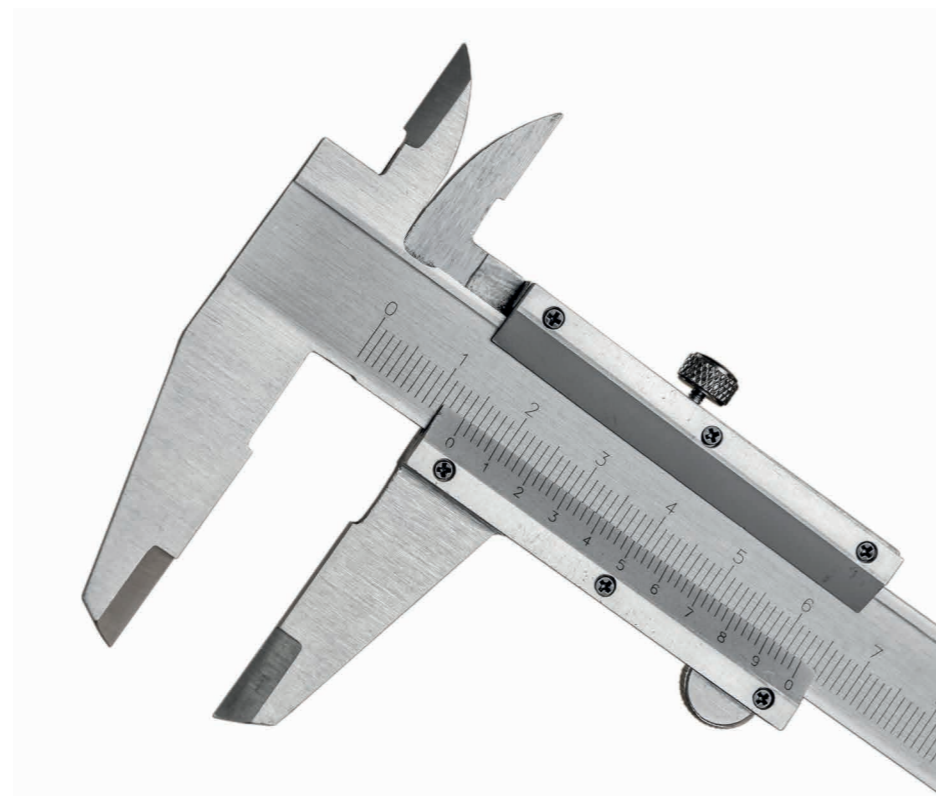
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TEACHERS WHO HAVE MADE THE SWITCH

“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 expectations are high but they provide the clarity and support so that we can reach those standards.”

MR ANDREW DUFFEY
HEAD OF DESIGN TECHNOLOGY
& ENGINEERING AND COMPUTING

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