

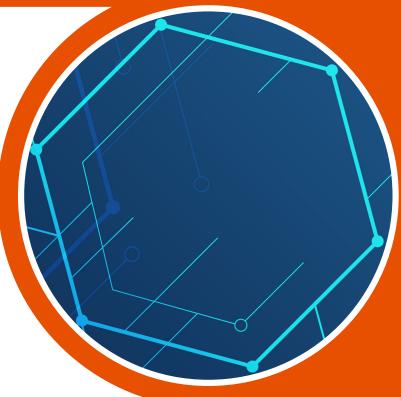
# Thrive with Eduqas.

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

Switch to us and thrive!

# A level Design and Technology

Your step-by-step guide



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# 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!

Follow this switcher guide for your subject

Register your interest and receive a printed copy of your chosen specification(s)

Visit your qualification page to access the materials you need to begin teaching our specifications

Visit our Digital Resources website for free resources that can be used as classroom aids and as revision tools

Contact <u>our subject specialists</u> for subject specific queries, practical advice and guidance

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Your Exams Officer will need to register <u>your</u> <u>centre</u>, if your centre is not already registered with us

You will be granted access to our <u>Secure</u> <u>Website</u> 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

Switch to us: eduqas.co.uk/switch-to-us

# 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 <u>our Regional Support Team webpages</u>.



# A level 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 GCE Design and Technology specifications.
- 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

#### 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

# Summary of assessment

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

The structure of the content within two endorsed routes of fashion and textiles and product design share the same structure at AS level and A level respectively (though with material-specific amplification where appropriate).

#### AS level (Standalone qualification)

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

Learners take a single examination in one of the following endorsed routes:

- Fashion and Textiles
- Product Design

Component 1: Design and Technology in the 21st century

Written examination: 2 hours 30 minutes 50% of qualification 100 marks

The examination includes a mix of short answer, structured and extended writing questions assessing learners'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: 40 hours approximately 50% of qualification 100 marks

#### A level

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

Learners take a single examination in one of the following endorsed routes:

- Fashion and Textiles
- Product Design

Component 1: Design and Technology in the 21st century

Written examination: 2 hours 30 minutes 50% of qualification 100 marks

The examination includes a mix of short answer, structured and extended writing questions assessing learners'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: A sustained design and make project

Non-exam assessment: 80 hours approximately 50% of qualification 100 marks

# Comparing specifications

Eduqas Fashion & Textiles; Product Design	Fashion 8	<b>CR</b> & Textiles; t Design	Fashion &	<b>QA</b> & Textiles; t Design	Product	r <b>son</b> Design
Designing and Innovation (AS & A level)	AS	А	AS	А	AS	А
Principles of designing	Yes	Yes	Yes	Yes	Yes	Yes
Research technique	Yes	Yes	Yes	Yes	Yes	Yes
Analysis of the problem	Yes	Yes	Yes	Yes	Yes	Yes
Problem solving strategies	Yes	Yes	Yes	Yes	Yes	Yes
Quantitative and qualitative testing	Yes	Yes	Yes	Yes	Yes	Yes
Ergonomics and anthropometrics	Yes	Yes	Yes	Yes	Yes	Yes
Computer systems for designing	No	Yes	Yes	Yes	Yes	Yes
Innovation	No	Yes	No	Yes	No	Yes
Consider wider issues when designing	Yes	Yes	Yes	Yes	Yes	Yes
Research, plan and evaluate	Yes	Yes	Yes	Yes	Yes	Yes
Generate and develop ideas	Yes	Yes	Yes	Yes	Yes	Yes
Develop proposals	Yes	Yes	Yes	Yes	Yes	Yes
Detail design	Yes	Yes	Yes	Yes	Yes	Yes
Communicate ideas and information	Yes	Yes	Yes	Yes	Yes	Yes
Materials and components (AS & A level)	AS	А	AS	А	AS	А
Materials and their application	Yes	Yes	Yes	Yes	Yes	Yes
Working characteristics of materials	Yes	Yes	Yes	Yes	Yes	Yes
Materials with specific properties	Yes	Yes	Yes	Yes	Yes	Yes
Modern material technology	Yes	Yes	Yes	Yes	Yes	Yes
Materials for specific requirements	Yes	Yes	Yes	Yes	Yes	Yes
Choice of finishes	Yes	Yes	Yes	Yes	Yes	Yes
Components and their application	Yes	Yes	Yes	Yes	Yes	Yes
Safe working practices	Yes	Yes	Yes	Yes	Yes	Yes
Work with materials and components	Yes	Yes	Yes	Yes	Yes	Yes
Processes	AS	А	AS	А	AS	А
Hand methods	Yes	Yes	Yes	Yes	Yes	Yes
Machine methods	Yes	Yes	Yes	Yes	Yes	Yes
Combining/forming materials	Yes	Yes	Yes	Yes	Yes	Yes
Computer-aided manufacture	Yes	Yes	Yes	Yes	Yes	Yes
Work with tools and equipment	Yes	Yes	Yes	Yes	No	Yes
Work with materials, components	Yes	Yes	Yes	Yes	No	Yes
Industrial and commercial practice (AS & A level)	AS	А	AS	А	AS	А
Scales of manufacture	Yes	Yes	Yes	Yes	Yes	Yes
Detailed manufacturing methods	Yes	Yes	Yes	Yes	Yes	Yes
Safe working practices	Yes	Yes	Yes	Yes	Yes	Yes
Industrial and commercial practice (A level only)	AS	А	AS	А	AS	А
Stages of production	No	Yes	No	Yes	No	Yes
Management systems	No	Yes	No	Yes	No	Yes
Industrial methodology	Yes	Yes	No	Yes	No	Yes

# Comparing specifications

<b>Eduqas</b> Fashion & Textiles; Product Design	Fashion a	CR & Textiles; t Design	Fashion &	<b>QA</b> & Textiles; : Design	Pear Product or	Design
Product analysis and systems (AS & A level)	AS	А	AS	А	AS	А
Design and production	Yes	Yes	Yes	Yes	No	Yes
Form and function	Yes	Yes	No	Yes	Yes	Yes
Trends & influences on design	Yes	Yes	Yes	Yes	Yes	Yes
Intellectual Property & Standards	No	Yes	No	Yes	No	Yes
Issues when designing	Yes	Yes	Yes	Yes	Yes	Yes
Systems analysis	No	No	No	No	No	Yes
ICT when planning	Yes	Yes	Yes	Yes	No	Yes
ICT when designing and making	Yes	Yes	Yes	Yes	Yes	Yes
Product analysis and systems (A level only)	AS	А	AS	А	AS	А
Systems and sub-systems	No	Yes	Yes	Yes	No	Yes
Control systems	No	Yes	No	Yes	No	Yes
The use of ICT	Yes	Yes	Yes	Yes	No	Yes
Human responsibility (A level only)	AS	А	AS	А	AS	А
Service to the customer	No	Yes	No	Yes	No	Yes
Regulatory frameworks	No	Yes	Yes	Yes	No	Yes
Risk assessment procedures	No	No	No	Yes	Yes	Yes
Values in design solutions	No	No	Yes	Yes	Yes	Yes
Forms of energy	No	No	Yes	Yes	No	Yes
Responsibilities when designing	Yes	Yes	Yes	Yes	Yes	Yes
Quality (of the product)	No	Yes	Yes	Yes	No	Yes
Quality (human processes)	No	No	Yes	Yes	No	Yes
Public interaction (A level only)	AS	А	AS	А	AS	А
Innovation in the market	No	No	No	Yes	Yes	Yes
Researching the market	Yes	Yes	No	Yes	No	Yes
Selling the product	Yes	Yes	Yes	Yes	No	Yes
Diffusion of products	No	Yes	No	Yes	No	Yes
Researching	No	No	No	Yes	No	Yes
Market/client needs	No	Yes	Yes	Yes	Yes	Yes
Determine product marketability	No	Yes	No	Yes	No	Yes
Evaluate products	Yes	Yes	No	Yes	No	Yes

# Written examination AS level

<b>Eduqas</b> Fashion & Textiles; Product Design	OCR Fashion & Textiles; Product Design	<b>AQA</b> Fashion & Textiles; Product Design	Pearson Product Design only
Component 1	Component 01	Paper 1	Paper 1
Researching the market Written examination 2.5 hours	1 hr 45 mins	1 hr 30 mins	2 hours
Selling the product 50% qualification	Yes	Yes	Yes
100 marks	90 marks	80 marks	100 marks
15% mathematical skills in D& T context	Yes	Yes	Yes

# Comparing specifications

# (NEA) Non Exam Assessment AS level

Eduqas Fashion & Textiles; Product Design	OCR Fashion & Textiles; Product Design	AQA Fashion & Textiles; Product Design	Pearson Product Design only
Component 2	Component 02 or 03	NEA	Yes
Contextual challenge set by Eduqas on June 1st in the calendar year preceding the award	Yes	Yes	Yes
NEA: approximately 40 hours	Approx. 40 hours	Approx. 30 – 35 hours	Not specified
50% qualification	Yes	Yes	Yes
100 marks	100 marks	80 marks	100 marks
Identifying and investigating design possibilities. 15 marks	<b>Strand 1:</b> Explore, 24 marks	Yes	10 marks
Developing a design brief and specification 15 marks	Chrond Or		10 marks
Generating and developing design ideas. 25 marks	Strand 3: Create - design communication, 12 marks	<ul> <li>Generating design ideas 20 marks</li> <li>Developing design ideas 20 marks</li> </ul>	Design 38 marks
Manufacturing a prototype. 25 marks	<b>Strand 4</b> : Final prototype, 15 marks	• Realising design ideas, 20 marks	30 marks
Analysing and evaluating design decisions and prototypes. 20 marks	<b>Strand 5</b> : Evaluate, 23 marks	Yes	12 marks

### Written Examination A level

<b>Eduqas</b> Fashion & Textiles; Product Design	OCR Fashion & Textiles; Product Design	AQA Fashion & Textiles; Product Design	Pearson Product Design only
Component 1	Component 01 or 02	Paper 1, Paper 2	Yes
Written examination 3 hours	(01) 1 hr 30 mins (02) 1 hr 45 mins	Paper 1: 2hrs 30 mins Paper 2: 1hr 30 mins	2 hr 30 mins
50% qualification	50%	Paper 1. 30% Paper 2. 20%	Yes
100 marks	150 marks Section A: Principles of (01) 80 marks Problem solving in (02) 70 marks	200 marks Paper 1: 120 marks Paper 2: 80 marks	120 marks
15% mathematical skills in D& T context	Yes	Yes	Yes
91	NXN		

# Comparing specifications

# (NEA) Non Exam Assessment A level

<b>Eduqas</b> Fashion & Textiles; Product Design	OCR Fashion & Textiles; Product Design	AQA Fashion & Textiles; Product Design	Pearson Product Design only
Component 2	Component 02 or 03	NEA	Yes
Design brief set by learner	Yes		Yes
NEA: approximately 80 hours	Approx. 65 hours	Not specified	Not specified
50% qualification	Yes Yes		Yes
100 marks	100 marks	100 marks	120 marks
Identifying and investigating design possibilities. 15 marks	Strand 1: Explore		24 marks
Developing a design brief and specification 15 marks	25 marks <b>Strand 2:</b> Create design thinking 10 marks	10 marks	9 marks
Generating and developing design ideas. 25 marks	<b>Strand 3:</b> Create - design communication 13 marks	Development of design proposal(s) 25 marks	Design a prototype 45 marks
Manufacturing a prototype. 25 marks	<b>Strand 4</b> : Final prototype, 18 marks	Yes	30 marks
Analysing and evaluating design decisions and prototypes. 20 marks	<b>Strand 5</b> : Evaluate, 25 marks	Yes	12 marks



# A level Design and Technology

Your step-by-step guide

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