Why choose WJEC Eduqas GCSE Design and Technology?

Design and Technology is purposeful, as well as being fun and exciting! Studying GCSE Design and Technology will build on what you learnt about designing and making in Key Stage 3. You will use your knowledge and skills to design and make new and better solutions to real problems - on your own and with others - working with materials you choose.

What skills will I develop?

Studying Design and Technology will enable you to develop a wide range of transferable skills for further education, work and life:

o   Creative and innovative thinking
o   Use of imagination and experimentation
o   Ability to critique and refine your own ideas
o   Knowledge and understanding of all design and technological activity and influences
o   Decision making skills
o   Develop high quality, imaginative and functional prototypes
o   Communication skills
o   Independence
o   Teamwork
o   Perseverance

What will I study?

Year 10 breakdown: * CAD/CAM, Polymers = Acrylic keyring
* Iteration, User needs and wants, anthropometrics, ergonomics, sustainability & prototyping = pizza wheel cutter
* Timbers specialist unit = Trinket box
* Mini NEA lighting unit
* Metals & Papers and boards = aliminerals + packaging
* Textiles = stress doughnut/ bookmark
* Start NEA

Year 11 breakdown: * NEA
* Revision

Common Myths

It's all about making things.

•The biggest change from KS3 is the theory content, there is a 50% written exam so there is a lot of theory content to cover.

It's not as important as other subjects.

•DT is an ACCADEMIC subject. Universities (and employers) recognise it as a very important subject and a very challenging one.

I have to be good at drawing and making.

•Drawing helps but you can communicate your ideas in other ways. Creativity and problem-solving skills are the most important alongside a relentless work ethic.

What use is it? I don't want to go into a D&T job.

•Look what universities and employers are looking for – Interchangeable skills, creativity, independence, problem solving and innovation.

GCSE Design Technology

eduqas Part of WJEC

What will I be doing?

Understanding users
• who your product is for
• what their needs and preferences are
• how the product will be used

Sustainable design
• including sustainability in every design
• awareness of all aspects of sustainability, from source to material processing and manufacture to the end product and end of life

Knowing about materials
• learning about smart and modern materials
• considering their working properties
• selecting and using the best materials to make your design solutions

Designing
• taking risks to create more imaginative ideas
• taking ideas forward stage by stage, with CAD and prototype models
• clearly communicating your design ideas to others

Making
• working safely with tools, equipment and machinery – including CAD/CAM 3D printers • making high quality working prototypes
• considering the costs and implications of commercial production

Knowing how things work
• using mechanisms, electronics and computers to control products, including robots
• designing and making products to withstand forces and not fail in use
• knowing how energy can be stored and used

Analysing products
• understanding how products have been designed and made
• considering the suitability, and sustainability, of everyday items
• learning about the work of past and present designers, makers and engineers.

Evaluating your own and others' work
• expressing opinions and challenging assumptions about products and services
• making informed decisions and judgements,

How will I be assessed?

Year 10 Breakdown: Project work, Homework, End of unit tests & Mini NEA

Year 11 Breakdown: Exam 50% - Design and make in the 21st Century
A mix of short, structured and extended writing questions

Non Examined Assessment (NEA) 50% -
Design and make task
Identify, investigate and outline design possibilities
Design and make prototypes
Analyse and evaluate design decisions

Careers

Careers for the future Technology is developing all the time and keeping up with fast-paced change is essential. The jobs people will be doing tomorrow will be radically different from many of those done today. Future proofing your prospects is essential if you are to have control over your choices. GCSE D&T opens doors to a wide range of careers, the knowledge and skills you learn, such as teamwork and time management will be valued by employers.
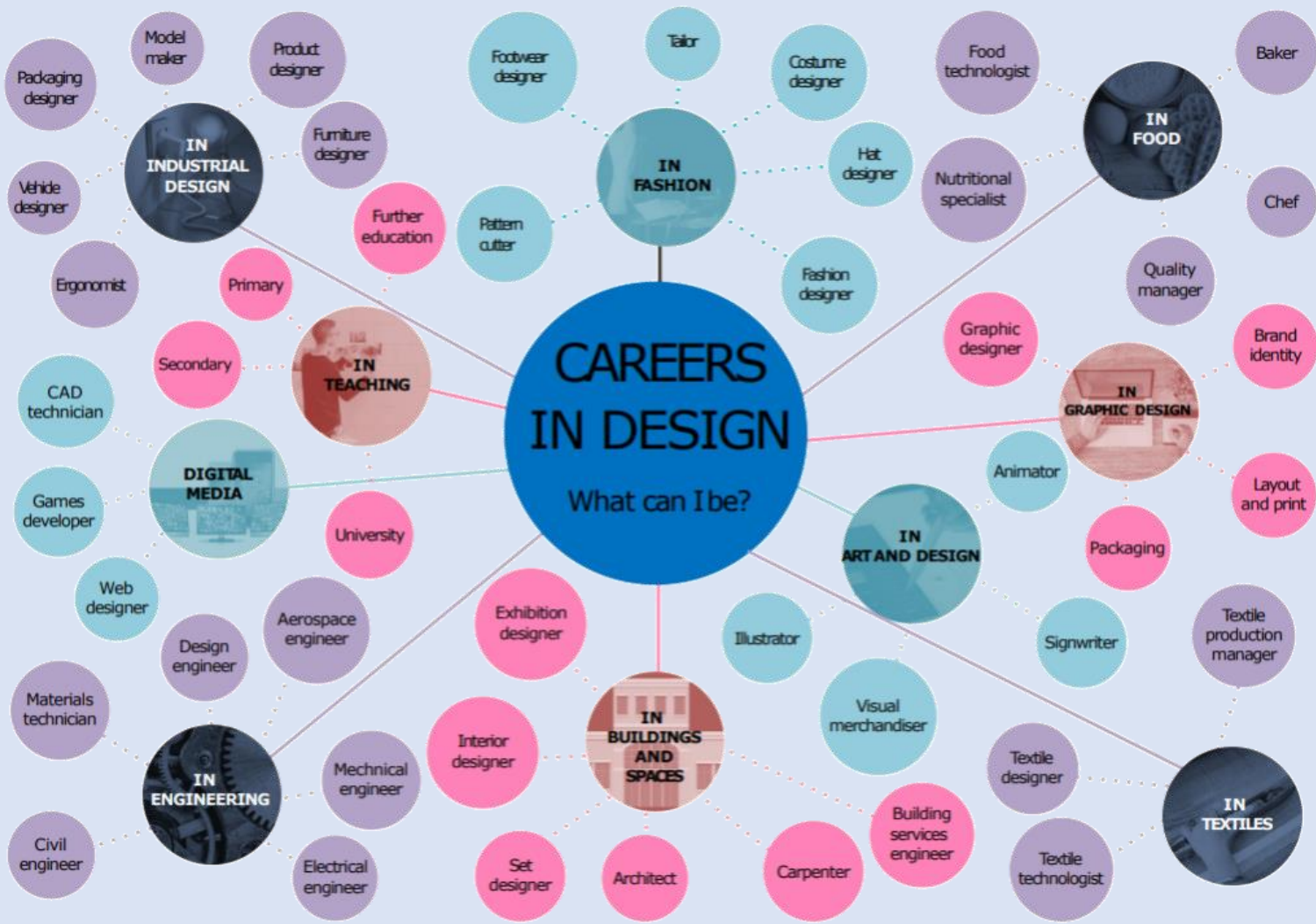
GCSE Design Technology can lead to studying A Level Product design at Long road, Bishops Laney or at The Oakes in Cambridge, along with many other appropriate courses.

CAREERS IN DESIGN
What can I be?

IN INDUSTRIAL DESIGN
- Model maker
- Product designer
- Packaging designer
- Furniture designer
- Vehicle designer
- Ergonomist
- Further education

IN FASHION
- Tailor
- Costume designer
- Footwear designer
- Hat designer
- Pattern cutter
- Fashion designer

IN FOOD
- Food technologist
- Baker
- Chef
- Nutritional specialist
- Quality manager

IN TEACHING
- Primary
- Secondary

DIGITAL MEDIA
- University

IN GRAPHIC DESIGN
- Graphic designer
- Brand identity
- Animator
- Layout and print
- Packaging

IN ART AND DESIGN
- Illustrator
- Signwriter
- Visual merchandiser

IN ENGINEERING
- CAD technician
- Games developer
- Web designer
- Aerospace engineer
- Design engineer
- Materials technician
- Mechanical engineer
- Civil engineer
- Electrical engineer

IN BUILDINGS AND SPACES
- Exhibition designer
- Interior designer
- Set designer
- Architect
- Carpenter
- Building services engineer

IN TEXTILES
- Textile production manager
- Textile designer
- Textile technologist

What do other students have to say about it?

"It's hard work but very rewarding"
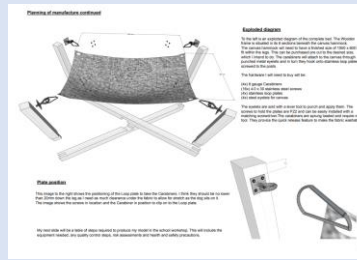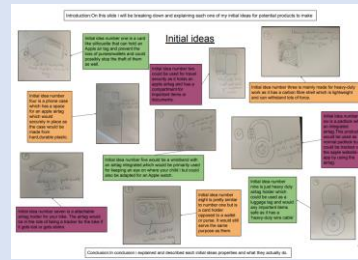"It's fun"
"It gives me lots of skills that I will use in life"
"I didn't realise how academic it would be"
"I like the creativity and the design work"
"I like how taking this course can lead to lots of other courses at college, uni and job opportunities"

GCSE Design Technology Course breakdown

- 100% course pass success rate
- 68% Students achieved a grade 5 or above
- 21% Students achieved a grade 7 or above
- SVC students have achieved significantly above national average results for the past 3 years.
- SVC students consistently achieve results in the top 10% of schools nationally.

Let's go invent tomorrow rather than worrying about what happened yesterday.
— Steve Jobs

"Your success will not be determined by your gender or your ethnicity, but only on the scope of your dreams."
~ ZAHA HADID