

Studying design and technology can offer students the unique opportunity to improve people's lives by tackling real-life problems, by learning not just about hands-on design and the product life cycle, but also how people drive the need for constantly improved technology. From skills and knowledge, to specific job roles, this edition we take a look at exactly where design and technology can take your students — mapping out the routes to get there.

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What workplace skills does design and technology develop?

Collaboration: Working with others is essential in many roles. If you're a research scientist you'll often be part of a team working on the same piece of research. Or if you take a job as a software engineer you'll usually be part of a larger team creating a new computer programme.

Methodical thinking: Whether you're designing a dress as a fashion designer or creating plans for a new home as an interior designer, you need to approach it methodically. This is important in many jobs outside of design though. You could be a police officer following the evidence to help solve a crime. Or you

might be a journalist piecing together facts for a story.

And one you might not have thought of...

Critical evaluation: It's important to be able to assess and evaluate work and situations in a number of jobs. You might be an economist who's evaluating the economic performance of a particular sector or country. Or you might be working as an automotive engineer and looking for ways to improve the design of a new vehicle.



What jobs can you get with design and technology?

Textile designers create designs for fabrics. Choose A-level design and technology and specialise in fashion and textiles. Choose a degree in art and design, fashion or textiles. Or look for an apprenticeship as a fashion and textiles product technologist.

Design engineers can work in many different areas, including civil engineering, mechanical engineering and software engineering. Choose a degree in an engineering discipline, or an engineering apprenticeship.

Purchasing managers buy the things a company needs to operate. Choose a degree in purchasing and logistics, business studies, purchasing and supply or marketing. Or find an apprenticeship as a supply chain leadership professional.

Apply for an apprenticeship... or go to university?



University

Almost half of all graduates on design degrees in 2017 secured jobs as arts, design and media

Apprenticeships

Apprenticeships for students who want to pursue a design and technology-related career include: engineering design and draughtsperson, fashion studio assistant, manufacturing engineer, fashion and textiles pattern cutter, food and drink engineer, junior 2D artist, packaging professional, watchmaker.

professionals. Degrees varied from product design to fashion design and graphic design. Among the roles these qualifications open up are fashion design tailor, junior graphic designer and clothes designer. Just under 14% of 2017 design graduates are self-employed, usually working as freelance designers.

What did design and technology do for them?

"The hands-on work you do in school is useful to prepare you for trade training. It's where you get to learn about the types of vehicles and equipment you'll be working on and the tools and kit you have at your disposal to do the job."



—Brandon, Vehicle and Mechanical Equipment Technician for the RAF. Read the full interview here.

"Laying out drawings and making quick sketches is a vital part of my role. It's often assumed that maths and physics would be crucial but I find design and technology most useful. It taught me how to draw by hand and communicate an idea on paper before it is produced."

—Alexander, structural apprentice, Arup



"In my role I have to understand how everything works together, whether that's technical components on a train or how the departments within the business work together to operate trains daily; these are known as interfaces.

During college we were educated on the railway system as a whole."

—Caitlin, Higher Fleet Apprentice, TransPennine Express



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