



# **My Learning My Future**

## **Where can studying Product Design take you?**

Highlighting the relevance of Product Design to future careers and opportunities



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## Why Product Design matters

Have you ever considered where studying Product Design can take you?

Today, we'll be exploring some of the career opportunities that are available to you, as well as the various pathways you can take to get there.

What pathways can you take with this subject?

What do you think these roles involve (daily task, etc.)?

What careers can you think of that use Product Design?

Why is Product Design an important subject?

Why Design matters -  
The School of Life -  
YouTube

What skills do you think you might need for these roles?



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Explore a  
career as a...

Here are some  
example roles and  
careers linked to

Product Design



Furniture Maker/Carpenter

BBC Bitesize case study

BBC Bitesize case study



Product Designer

BBC Bitesize case study

First Careers case study

Youtube case study



Architectural Assistant/  
Technologist

BBC Bitesize case study

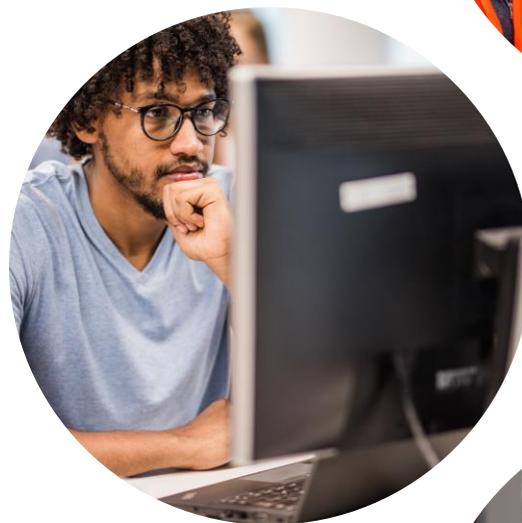


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Explore a  
career as a...

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careers linked to

Product Design



UX Designer

BBC Bitesize case study



Packaging  
Technologist

Youtube case study

BBC Bitesize case study



Design and  
Development Engineer

BBC Bitesize case study

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# Discover more about the role

Explore careers using [National Careers Service](#) and find out about what jobs involve and how they are right for you

## Includes:

- Average salary
- Typical hours
- Work patterns
- Pathways/How to become
- Essential Skills
- Daily tasks
- Career path and progression
- Current opportunities

## Research Ideas:

[Carpenter](#)  
[Product Designer](#)  
[Architectural Technologist](#)  
[Design and Development Engineer](#)  
[UX Designer](#)  
[Packaging Technologist](#)

## National Careers Service

We provide information, advice and guidance to help you make decisions on learning, training and work.

This service is available to people who live in England.

### Skills assessment

Learn more about your skills and match them to potential new careers.

[Assess your skills](#)

### Explore careers

Choose from over 800 career profiles to discover what each job involves.

[Search job profiles](#)

### Find a course

Look for online learning opportunities and training courses local to you.

[Look for courses](#)

## Careers advice

### Making career choices

Whether starting your career, changing job or if you have been affected by COVID-19, understand and make the right choice for you.

### Getting a job

Be successful in the recruitment process with tips on great CVs, interviews and graduate scheme applications.

### Progressing your career

Move up in your career by developing new skills. Find opportunities like volunteering and online learning.

### About us

The National Careers Service can help you with your career, learning and training choices. [Find out more](#) about the different ways we can support you.

### Speak to a careers adviser

Wherever you are in your decision-making, you can call us on [0800 100 900](tel:0800100900) or [use webchat](#).

### Follow us

- Twitter
- Facebook
- LinkedIn
- YouTube



# Why not teach Product Design?

Start in the classroom, where you go from there is up to you. Bring your passion for your subject, keep learning, and pass your knowledge onto others

- No two days are the same – and neither are the pupils
- Once qualified you can teach throughout your life
- You could teach abroad
- Progress your career into leadership and management
- Bring your outside interests into the classroom and your subject

# Why is STEM important?

- It boosts essential skills such as problem solving and curiosity
- It helps you see and understand the wider world around you
- It helps young people become future entrepreneurs

## Explore teaching

[Vjendra's Story](#)

[Every Lesson  
Shapes a Life](#)

## The right skills to teach?

[Love to keep  
learning?](#)

[Love to nurture  
imagination?](#)

What makes a great  
teacher?



## GCSE

While there are different routes you can take to be a teacher there are a few essential things that you will need:

- A minimum GCSE Grade 4 or above in English and maths (plus science if you want to teach primary)
- A degree or equivalent qualification

### A level

A levels are 2 years of study

### T Level

T Levels are nationally recognised, technical qualifications for 16–19-year-olds. Designed by leading employers, one T Level is equivalent in size to 3 A levels

### Vocational/Technical Qualification

These include BTEC, Applied General Qualifications (AGQ) and Vocational Technical Qualifications (VTQ) – all at Level 3

### Apprenticeship

Apprenticeships are jobs which combine practical work and study. Intermediate is Level 2, Advanced is Level 3

### Degree

#### Complete a degree course

It is possible to get QTS as part of an undergraduate degree, for example:

- Bachelor of Arts (BA) with QTS
- Bachelor of Education (BEd) with QTS
- Bachelor of Science (BSc) with QTS

### Level 4/5 qualifications

Complete a L4/5 course and top up to a degree – L4/5 includes Certificate of HE, Diploma of HE, Higher Technical Qualification (HTQ), HNC, HND and Foundation degrees

Top up to a degree (Level 6) in a year of full-time study

### Higher apprenticeships

Higher level apprenticeship (foundation degree / Level 5)

### Degree apprenticeships

Degree apprenticeship (Level 6-7). There is a Level 6 Teaching apprenticeship programme

## Initial Teacher Training (ITT) with qualified teacher status (QTS)

## Teacher



- Pick a topic in Product Design you think you would like to try and teach
- Agree your choice of topic with your teacher and the length of session (and with which group)  
(It may be the perfect opportunity to try this with a younger class lower down the school, or as a transition activity for Y6)
- Plan a short activity to cover the topic in a way you feel will be engaging and memorable for your peers as part of a lesson starter, main activity or plenary

### Consider:

- What are you trying to achieve (teach)? Be clear what information you intend to impart
- How will you make it fun? How will you make it 'stick'? How long will this take?
- What type of activity will you plan for? (written/practical)
- How will you know others have learned it?
- How will you make sure everyone is stretched and challenged?
- What will the end-product be?

Once you have checked it with your teacher, try the lesson with a small group (as agreed by your teacher)  
Try and get feedback during and after the session from those in the lessons and from the teacher

### After, consider:

- What you enjoyed about the experience
- Whether this is something, with training, you would enjoy
- How you felt when others learned from you



## 5 | Non-obvious jobs using Product Design: Ever thought about..?

➤ [How to become an Architectural Assistant: Hannah's story](#)

➤ [How to become an Innovation Manager: Holly's story](#)

➤ [How to become a Product Designer: Michael's story](#)

➤ [Careers ideas and information - Design Technology \(Product Design\)](#)

➤ [Blacksmith | Explore careers | National Careers Service](#)

➤ [Engineering Craft Machinist | Explore careers | National Careers Service](#)

➤ [Design and Development Engineer | Explore careers | National Careers Service](#)



<https://www.bbc.co.uk/bitesize/articles/zhst2sg>



<https://nationalcareers.service.gov.uk/explore-careers>



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## MYPATH Job of the week (Product Design)



Urban Designer



Furniture Designer



Quantity Surveyor





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# Product Design careers in a changing world: How can I future-proof my career pathway?

The world will be changing drastically in the next few years to cope with the impacts of climate change and nature loss, and the need to lower greenhouse gas emissions and unsustainable practices. How might this steer your choice of career path using your Product Design skills?

**Sustainability**  
means meeting our own needs without compromising the ability of future generations to meet their own needs.  
*(UN definition)*



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# Product Design careers in a changing world



Sustainable Design Entrepreneur



Sustainable Product Designer



Sustainable Business Co Founder



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# A spotlight on Technicians using Product Design

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6 |



Discover here how the technical jobs related to Product Design keep industries moving and the real difference technicians make in our lives.

R046 Food  
Packaging  
Technician

R069  
Testing  
Engineering  
Technician

R077  
Propulsion  
Technician

R004  
Design  
Technician  
(CAD)

R005  
Robotics  
Technician



GATSBY



**Technicians**  
We make the  
difference

[Visit the Gallery here](#)

[Find further resources here](#)



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R025  
Composites  
Technician

R064  
Mechanical  
Fitting  
Technician

R078  
Prosthetic  
and Orthotic  
Technician

R014  
Bike  
Technician

R040  
Engineering  
Construction  
Pipefitter

R041  
Engineering  
Manufacturing  
Technician

R099  
Welding  
Technician



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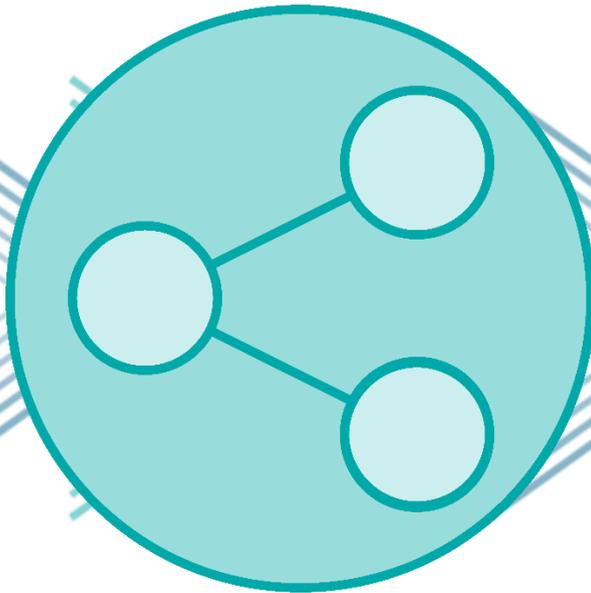


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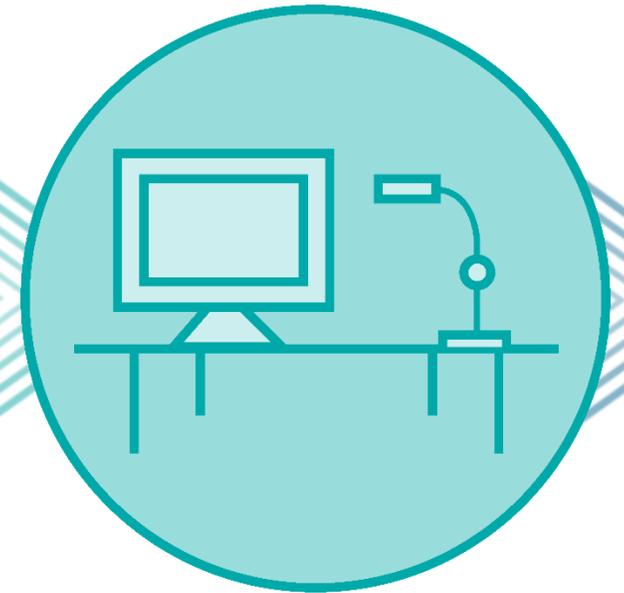
## 7 | Product Design Pathways



Combine Study  
and Work



Study



Work



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# 7 | Combine Study and Work

## Apprenticeships

- Trainee Designer
- Room Designer
- Furniture Designer
- Junior CAD Designer
- Games Designer
- Design Operations
- Product Designer and Development
- Junior Product Design Engineer
- Construction Technician

## T Levels

[T Levels | National Careers Service Digital Production, Design and Development](#)

[T Levels | Design and Development for Engineering and Manufacturing](#)

[T Levels | Engineering Manufacturing, Processing and Control](#)

[T Levels | Design, Surveying and planning for Construction](#)

[T Levels | Building Services Engineering for Construction](#)

[T Levels | Onsite Construction | T Levels](#)

[T Levels | Craft and Design | T Levels](#)

## VTQs

[Vocational Technical Qualifications \(VTQs\) | National Careers Service](#)

- Engineering
- Design and Technology
- Engineering Design
- Creative iMedia
- Digital Media
- Product Design



[Find more >](#)



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# 7 | Study Pathways

## HTQs (Higher Technical Qualifications)

Higher technical qualifications (HTQs) | National Careers Service

**You might find courses in:**

- Product Design Engineering
- Building Services Engineering
- Digital Technologies
- Engineering
- Civil Engineering
- Garden and Landscape Design
- Games Production and Design
- 3D Design
- Architectural Design Technology
- Digital Learning Design

## A levels

A levels | National Careers Service

**You might find courses in:**

- Electronics
- Computer Science
- Design and Technology: Product Design
- Engineering
- Engineering: Design Engineering
- Engineering: Design Mechatronics
- Engineering Technology: Video Games

## Higher education

Higher education | National Careers Service

You can explore undergraduate courses in Product Design

**You might find courses in:**

- Aircraft Design
- Airframe Design and Flight Dynamics
- Architecture
- Landscape and Garden Design
- Product Design
- Product Design and Technology
- Engineering
- Digital Environment Building
- Design and Development Engineering





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## 7 | Work Pathways

### Supported internships with an education, health and care plan

[Supported internships | National Careers Service](#)

[Watch Saul's story](#)

**You might read about:**

- [Access to Work Funding](#) (if you have a disability or health condition)
- [Preparing for Adulthood](#)
- [Talking Futures](#) (A parents' toolkit for career conversations)

### School leaver schemes

[School leaver schemes | National Careers Service](#)

**You might read about:**

- [How to fill in an application form](#)
- [How to write a CV](#)
- [Interview help](#)
- [Progressing your career](#) (Careers Advice from NCS)





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## 7 | University League Tables

See at a glance the university ranking for Architecture and Production Engineering

[Architecture Rankings \(thecompleteuniversityguide.co.uk\)](https://thecompleteuniversityguide.co.uk)

[Production Engineering](#)

### Filter by:

- Overall score
- Entry standards
- Student satisfaction
- Research quality
- Research intensity
- Graduate prospects





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# Discover Uni

Have you ever  
considered if higher  
education is right  
for you?

1. Go to <https://discoveruni.gov.uk/>

## 2. Search for a course or subject

(You should get a page of search results, you can filter these by university or college, whether you want to study full or part time or perhaps you want to see that courses are near you)

Once you have had a look at a few different courses and subjects now it is time to compare some side by side

3. Check out this video which shows you how to use our comparison tool <https://youtu.be/dBFzCQgTp8I> - Pick 5 courses and add these as a saved course and then you can compare

## 4. Once you have your chosen five side by side, try to answer the following questions:

- What kinds of qualifications do students on the course have when they start the course?
- How many have a placement year?
- How many courses let you study abroad?
- Which has the highest student satisfaction rating? How do you know this?
- What kinds of job do graduates from this course go on to?
- Which course has the highest salary after three years? (higher/lower than national average)
- Choose your favourite course and explain why you chose this course over the others?



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Is the data I am looking at for a course or a subject?

- a. What year, or years, does the data relate to?
- b. How many students or graduates is this data based on?
- c. Does the data represent all the students on the course or subject area?
- d. Does the data include people like me?
- e. What factors might impact the data?



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In 10 years time...

Job in 10 years time (related to  
Product Design):

---

What GCSEs helped you get this job:

---

What KS5 Pathways choice did you make and what did you study:

Apprenticeship

T level

A Level

other L3 equivalent

---

Post 18 pathways choices did you make: explain:

Study & Work

Study

Work

---

Essential skills used in the job:

---

Progression route:

---



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## My local options...

Subject chosen (related to Product Design):  
\_\_\_\_\_

Local college options:  
\_\_\_\_\_  
\_\_\_\_\_

Local apprenticeships options:  
\_\_\_\_\_  
\_\_\_\_\_

Other options:  
\_\_\_\_\_  
\_\_\_\_\_

The pros and cons of these options for me:

Pros:  
\_\_\_\_\_  
\_\_\_\_\_

Cons:  
\_\_\_\_\_  
\_\_\_\_\_

Consider how these will apply and explain:

Cost \_\_\_\_\_

Travel \_\_\_\_\_

Convenience \_\_\_\_\_

Aspirations \_\_\_\_\_

Personal circumstances \_\_\_\_\_

Other \_\_\_\_\_

Final choice – justify:  
\_\_\_\_\_  
\_\_\_\_\_

Next steps:  
\_\_\_\_\_  
\_\_\_\_\_



3 |



## Prepare a 3 - 5 minute talk to share with a small group on any role that interests you related to Product Design



What's the role?



Where do you need to go to carry out the role?



Where has the interest come from?



What's the chances of getting this role?



What do you need to do to become one?



Who do you look up to in this role?



Where can you go to study and what level of study?



What might a typical day look like?



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My career path....





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# Essential Skills

Here are three  
key skills  
needed for a  
career that  
uses



## Product Design

	Video	Skills Builder Resource KS3	Skills Builder Resource KS4	Skills Builder Resource Post 16
 The use of imagination and the generation of new ideas	<a href="#">Watch here</a>	<a href="#">Short Lesson Creativity Step 6-8</a>	<a href="#">Short Lesson Creativity Step 8-10</a>	<a href="#">Short Lesson Creativity Step 10-12</a>
 The ability to find a solution to a situation or challenge	<a href="#">Watch here</a>	<a href="#">Short Lesson Problem Solving Step 6-8</a>	<a href="#">Short Lesson Problem Solving Step 8-10</a>	<a href="#">Short Lesson Problem Solving Step 10-12</a>
 The oral transmission of information or ideas	<a href="#">Watch here</a>	<a href="#">Short Lesson Speaking Step 6-8</a>	<a href="#">Short Lesson Speaking Step 8-10</a>	<a href="#">Short Lesson Speaking Step 10-12</a>



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	<b>Creativity</b>	Tick which apply
Step 6	I use creativity in the context of work	
Step 7	I use creativity in the context of my wider life	
Step 8	I develop ideas by using mind mapping	
Step 9	I develop ideas by asking myself questions	
Step 10	I develop ideas by considering different perspectives	
Step 11	I innovate effectively when working in a group	
Step 12	I innovate effectively by seeking out varied experiences and stimuli	



**My Strength (s)**

**My area (s) of Development**



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	<b>Problem Solving</b>	Tick which apply
Step 6	I explore complex problems by identifying when there are no simple technical solutions	
Step 7	I explore complex problems by building my understanding through research	
Step 8	I explore complex problems by analysing the causes and effects	
Step 9	I create solutions for complex problems by generating a range of options	
Step 10	I create solutions for complex problems by evaluating the positive and negative effects of a range of options	
Step 11	I analyse complex problems by logical reasoning	
Step 12	I analyse complex problems by creating and testing hypotheses	



**My Strength (s)**

**My area (s) of Development**



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	<b>Speaking</b>	Tick which apply
Step 6	I speak effectively by using appropriate tone, expression and gesture	
Step 7	I speak engagingly by using facts and examples to support my points	
Step 8	I speak engagingly by using visual aids to support my points	
Step 9	I speak engagingly by using tone, expression and gesture to engage listeners	
Step 10	I speak adaptively by changing my language, tone and expression depending on the response of listeners	
Step 11	I speak adaptively by planning for different possible responses of listeners	
Step 12	I speak adaptively by changing my content depending on the response of listeners	



**My Strength (s)**

**My area (s) of Development**



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# Homework

## Explore careers

Find out what a job involves and if it's right for you.



# Use the National Careers Service Explore careers tool to research for this homework

[Explore here](#)



Where can studying Product Design take you?

Name: \_\_\_\_\_

Tutor group: \_\_\_\_\_

Match the description to a tool or piece of machinery you might use during Product Design:

Linisher

This is used for turning an item in order to carry out such operations as drilling, cutting or sanding.

Mortise Machine

This is used for intricate cutting work which can include tight curves. Although the coping saw is often used for similar work, the fretsaw is capable of much more delicate work.

Wood Lathe

This is used to accurately and precisely drill holes through a variety of materials.

Fret Saw

This is used to smooth materials such as woods and plastics. It is also used to remove small amounts of waste material.

Band Saw

This is a specialised woodworking machine used to cut square or rectangular holes in a piece of wood.

Pillar Drill

This is used for sanding the edges and faces of a piece of timber.

Disk Sander

This is a piece of machinery that is used to cut angled or curved shapes on a piece of wood.



Can you research each of the jobs below and write down information about what that job would involve.

Use the [National Careers Service](#) website to help

Design &  
Development Engineer

CAD Technician

Graphic Designer

Interior Designer



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