Product Design

My Learning, My Future

Bringing learning to life: Connecting Product Design to careers, pathways, and the world beyond the classroom

Using this guide

Introduction

At The Careers & Enterprise Company, our mission is to help every young person find their best next step.

The My Learning, My Future resources aim to increase learner engagement by showing how subjects connect to careers and the world of work.

They enable subject teachers to highlight the relevance of their subjects and make links to careers, pathways, and the world of work from their curriculum.

Additionally, these resources drive meaningful achievement of Gatsby Benchmark 4 and support the achievement of Gatsby Benchmarks 2, 5, 6, and 7.
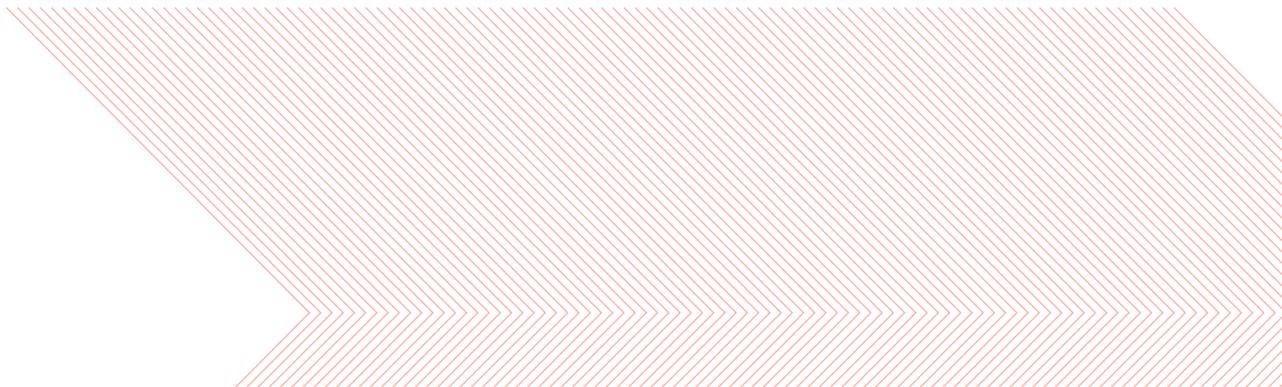
Content:

- Using this guide

- Why study Product Design

- Highlighting the relevance of studying Product Design with learners

- Making links from the Product Design curriculum to careers & essential Skills

- Meaningful employer encounters and work experiences linked to curriculum topics

- Product Design Pathway Maps

- Further information/support

- Acknowledgements

Using this guide and the learner slide deck

This guide and the learner slide deck are designed to help you easily:

- Highlight the value and relevance of your subject to a range of possible future careers and opportunities.

- Highlight all the main pathways from your subject to future careers and opportunities.

- Highlight to your learners how they are developing essential skills in each subject.

- Make links from the curriculum to careers.

- Explore meaningful employer encounters and work experiences to enhance engagement in curriculum teaching and learning.

Each section includes key links, inspiration and support to easily embed careers into the curriculum.

Why study Product Design?

In this section we explore the value of studying your subject and support you in how you share this messaging with learners, parents and carers.

This section highlights five key reasons to help you inspire learners by showing the value of studying your subject. These reasons are also featured in the learner slide deck.

Highlighting the relevance of studying Product Design with learners

This section supports you to highlight the relevance of your subject to careers and future opportunities. It includes quick-access links and practical ideas on how to easily do this within bell-tasks, home-learning or specific lessons aligned to option choices, etc.

The learner slide deck includes a showcase of example roles and careers linked to your subject, including not-so obvious roles learners may not have thought about. The learner slide deck also includes inspiration for 'Jobs of the Week' linked to your subject with homework tasks set out to support learner research into roles and sectors linked to your subject.

Making links from the curriculum to careers & essential skills

Beyond highlighting the relevance of your subject to careers, pathways and the world of work, this section supports you to bring learning to life through your lessons.

The inspiration section includes quick-access links and practical ideas to help you easily make regular links from the curriculum to careers and the world of work.

Meaningful employer encounters and work experiences linked to curriculum topics

This section supports you to explore and easily plan meaningful employer encounters and work experiences linked to curriculum topics to support engagement and learner motivation.

Pathway maps

This section supports you to understand all pathways from your subject with specific information and inspiration about all routes including technical, vocational and academic.

The learner slide deck features relevant pathway inspiration with specific course information and inspiration aligned to your subject.

Further information/support

This section signposts high-quality careers CPD opportunities, including free resources from The Careers & Enterprise Academy and Teacher Encounters programme.

Why study Product Design?

In this section we explore the value of studying Product Design and support you in how you share this messaging with learners, parents and carers.

Why study Product Design?

Pathway to exciting careers

Product Design can lead to careers in industrial design, architecture, engineering, fashion, interior design, and more.

Develop in-demand skills

You'll gain skills in sketching, CAD (computer-aided design), prototyping, and critical thinking valuable in many industries.

Blend art and engineering

It's a unique subject that brings together design, technology, materials science, and user experience.

Solve real-world problems

You will learn how to design products that improve people's lives, from everyday tools to innovative tech solutions.

Unleash your creativity

Product Design lets you turn ideas into real, functional objects combining imagination with practical problem-solving.

Reflection:

- Is there anything else you would add to this list?

- How do you share the importance of studying Product Design with learners?

- How do you communicate the value of studying Product Design with parents and carers?

Highlighting the relevance of studying Product Design with learners

Access the learner facing slide deck, which features the 'Why study Product Design' information above and supports learners to articulate their own response to why the study of Product Design is important.

💡 Inspiration

- Share your own careers story.

- Deliver a lesson introducing learners to Product Design related sector industries: Careers in Product Design.

- Deliver this Engineer your Future editable PowerPoint presentation to inspire your learners about careers in engineering: Engineer your future presentation | Career Resources | Neon - Brilliant inspiration.

- Use the learner facing slide deck to spotlight not so-obvious careers related to your subject by highlighting specific roles from the Engineering sector.

- Highlight a 'job of the week' linked to your subject: Slide 8 on learner facing My Learning, My Future slide deck or full library here: Job Of The Week | MYPATH Careers Resources.

- Create a display of careers and pathways for your classroom or for learner and parent and carer events (e.g. Amazing Apprenticeships Engineering Subject-Led Resources: Engineering subject-led Resource Bundles - Amazing Apprenticeships or 'This Is Engineering' posters | Career Resources | Neon - Brilliant inspiration or DT Association What is DT and here can it take you posters).

Useful links to explore and share with learners:

- BBC Bitesize: Careers that use design and technology: Careers that use design and technology – BBC Bitesize

- Prospects: Creative arts and design Creative arts and design job profiles | Prospects.ac.uk

- Prospects: Overview of the UK's product design sector: Overview of the UK's product design sector | Prospects.ac.uk

- Icould: Explore careers videos: Explore careers - icould

- Youth Employment UK: Career Guides For Young Adults - Youth Employment UK

- National Careers Service: Explore careers Explore careers | National Careers Service

Parent and carer engagement inspiration

Curriculum to Career: Subject skills sheets

Empower parents and carers to support young people's option choices with clear, visual resources that link KS4/KS5 subjects to real-world careers. Each sheet highlights transferable skills and pathways into Apprenticeships and Technical Education and are ideal for you to use within option evenings, parent meetings, and subject discussions to spark effective careers conversations linked to your subject at home: GCSE subject skills resource.

Why not encourage your learners to consider teaching?

As you know, teaching is a career like no other, where your voice, passion, background and how you view the world is used to inspire young people.

Here are a couple of case studies to inspire you to share your story with your learners.

You might also then select one to share with your learners.

See case study: Shaniqua's story

See case study: Daniel's story

Support learners to find out more about teaching: Get Into Teaching | Get Into Teaching GOV.UK

Making links from the Product Design curriculum to careers & essential skills

Beyond highlighting the relevance of your subject to careers, pathways and the world of work this section will support you in bringing learning to life through your lessons.

Supporting learners to understand how knowledge and skills developed in their curriculum learning helps gain entry to, and be more effective within, a wide range of pathways and occupations.

Inspiration:

Use the links below to:

- Make consistent and relevant links to careers and pathways as new topics or areas of learning are introduced.

- Include regular links within planning documents and schemes of work to show connections to roles or industries related to specific areas of learning.

- Use 'bell tasks,' plenaries, or home learning to explore skills, pathways, or roles related to specific lessons or topics Regularly map and clearly highlight key essential skills developed in each lesson.

Useful links:

- BBC Bitesize: Careers that use design and technology: Careers that use design and technology – BBC Bitesize

- Prospects: Creative arts and design Creative arts and design job profiles | Prospects.ac.uk

- Prospects: Overview of the UK's product design sector: Overview of the UK's product design sector | Prospects.ac.uk

- Icould: Explore careers videos: Explore careers - icould

- Youth Employment UK: Career Guides For Young Adults - Youth Employment UK

- Discover! Creative 'Careers finder': Find your perfect role in the creative industries - Creative Careers

- Skills Builder Universal Framework 2.0: The Universal Framework

Careers in the Curriculum

HE Unboxed

Request a Loughborough University HE Unboxed: Product Design Engineering * This box explores the psychological, technological and environmental impact of mobile phones.

STEM Learning Secondary and A-Level science – Key Stage 3, 4 and 5 resources

A selection of hand-picked resources covering all the statements in the Key Stage 3, 4 and 5 programmes of study.

Design & Technology| Resource Collection

The Co-op Academy Trust Resource for Design Technology

Developed by the Co-op Academy Trust, these resources have been created by curriculum experts to engage students as practically as possible. Teachers can use these fully resourced classroom-based packs to bring careers directly into the Design Technology curriculum at Key Stage 3.

The Co-op Academy Trust Resource for Design Technology | CEC Resource Directory

Causeway and STAR Academies - Year 7, 9, and GCSE Curriculum Resources

These resources have been created by curriculum subject experts to engage students as practically as possible in fully resourced classroom-based packs which teachers can use to highlight the application of curriculum topics to real job roles.

Causeway and STAR Academies - Year 7 Curriculum Resources | CEC Resource Directory

Causeway and STAR Academies - Year 9 Curriculum Resources | CEC Resource Directory

Causeway and STAR Academies - Year GCSE Curriculum Resources | CEC Resource Directory

Overview of Skills Builder and essential skills

Skills Builder Partnership is a global movement of employers, educators, and impact organisations working together to ensure that one day, everyone builds the essential skills to succeed. Essential skills are those highly transferable skills which support individuals to use their technical skills and knowledge. They ease how individuals work with other people, structure a problem to solve, or communicate what should happen.

The eight essential skills unlock learning in the classroom, boosting academic outcomes, perseverance and self belief. Higher levels of essential skills correlate with higher levels of achievement at the ages of 10 and 16. This makes perfect sense when you consider the components of listening, structuring problems, communicating ideas, and self-management and how, of course, they would help individuals to learn better.

Embedding essential skills into your lessons

The Skills Builder Universal Framework takes essential skills and breaks them down into four pairs of skills. It goes further by breaking each skill down into a sequence of 16 steps, going from an absolute beginner in essential skills through to a high level of mastery.

Each step is a micro-skill in its own right - whether note-taking, prototyping, or being diplomatic - which also contributes to the mastery of the overall skill. The sequencing of the steps has been tested and refined over eight years so that while no individual's journey of mastering essential skills is exactly the same, there is a clear data-driven model and age- and stage-related expectations to guide the educator.

We know that every learner is an individual. As with any other learning, individuals will progress at different rates and have other factors in their lives that will make it easier or more challenging to build these skills. Where individuals have additional learning needs or disabilities this can lead to 'spiky' profiles where they may excel in some essential skills and find others much more challenging.

The question of transferability is worth one final remark. In some settings, the notion of whether skills can ever be transferable beyond a particular domain or subject area is hotly debated. While expertise does not automatically translate across all areas, elements of skills do cross traditional boundaries. After all, those boundaries are simply human constructs. For example, a proficient car driver has a head start on cycling on the road or driving a lorry compared to the novice.

Your judgement as a teacher is paramount, but there are suggested step ranges to guide you:

- **Year 7:** Step 5-8

- **Year 8:** Step 6-9

- **Year 9:** Step 7-10

- **Year 10:** Step 8-11

- **Year 11:** Step 9-12

- **Year 12:** Step 10-13

Support and resources at your fingertips

Building employability skills into subject lessons is a critical part of embedding careers in the curriculum. It is best to combine focused time to teach specific skill steps, and lots of opportunities to practise skills within activities that teach the subject content too.

On Skills Builder Hub, you can find three types of resources to help you:

1. Over 300 short lessons, which focus tightly on the skill step with a interactive tasks to teach the step

2. Curriculum guides, which outline a handful of activities to teach the subject content and an age-related skill step

3. Downloadable and printable reflection resources, like posters, passports and records to support learner reflection

Skills Builder Hub is already used by over 40,000 teachers and it's free to use, you just need to create a log in. Choose a skill and step, or search for the type of resource you would like to use.

As an **extension** to making links from the curriculum to careers, you may consider embedding curriculum learning in the context of the world of work.

Please note that this goes beyond requirements of Gatsby Benchmark 4 and requires an investment of time working with an employer to develop co-created teaching resources where learning points are embedded in the context of the world of work.

To further engage learners, you can explore how curriculum learning can be embedded in the context of the world of work.

This can be achieved by:

- Developing high-quality curriculum resources embedded within the world of work in partnership with employers. This allows you to engage learners, support their progress, and deliver curriculum outcomes effectively.

- Accessing the guide to engaging learners and supporting progress by embedding teaching in the context of the world of work.

Inspiration:

Careers in the Curriculum: KS3/4 Curriculum Resources produced by teachers from Academies Enterprise Trust, who worked with a range of employers to construct teaching & learning resources across different curriculum areas.

Examples of resources embedded in the context of the world of work can be accessed here:

AET and Pinewood: Careers in Maths Resource | CEC Resource Directory

Meaningful employer encounters and work experiences linked to curriculum topics

When learners see how your subject and specific topics connect to real jobs and workplaces, it brings learning to life.

Planning meaningful employer encounters and work experiences linked to curriculum topics can support engagement and learner motivation.

Why it matters:

- Helps learners understand how what they're learning is used in the real world.

- Boosts engagement and motivation by showing the purpose behind the content.

- Builds confidence and opens learners' eyes to future career paths and opportunities.

- Makes lessons more dynamic, relevant, and memorable.

Inspiration:

- Invite employers to speak to your class about the relevance and importance of your subject, a specific topic or even a particular teaching point.

- Plan activities, projects or assessed elements of your curriculum with employers that reflect real workplace challenges.

- Support learners in gaining hands-on experience through experiences of workplaces.

A meaningful encounter will:

- have a clear purpose, which is shared with the employer and the young person.

- be underpinned by learning outcomes that are appropriate to the needs of the young person.

- have opportunities for two-way interactions between the young person and the employer.

- be followed by time for the young person to reflect on the insights, knowledge or skills gained through the encounter.

Refer to these guides, including handy checklists to plan a meaningful encounter or work experience linked to your subject or your curriculum:

[Understanding how to embed progressive employer encounters and work experiences | CEC Resource Directory](#)
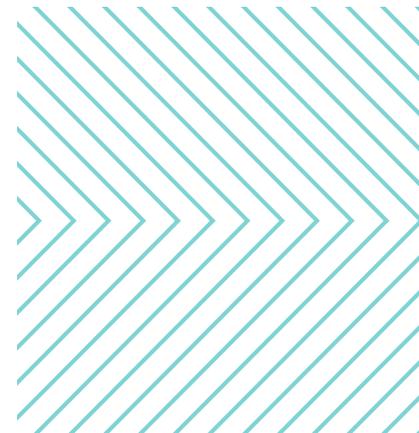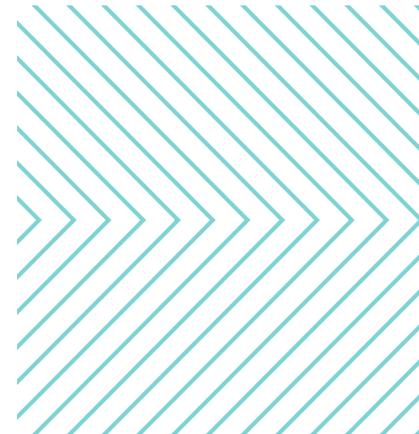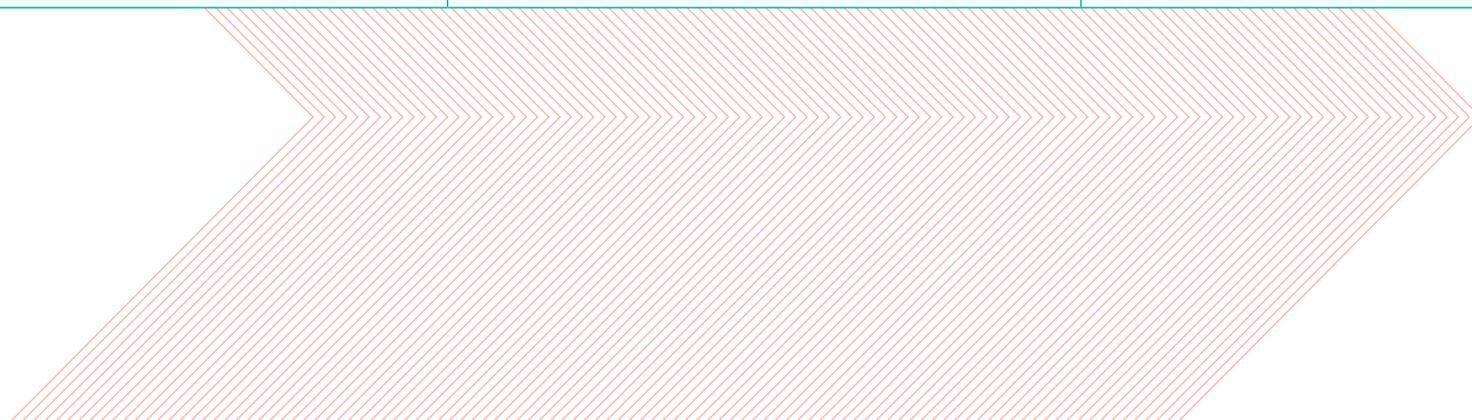
Product Design Pathway Maps

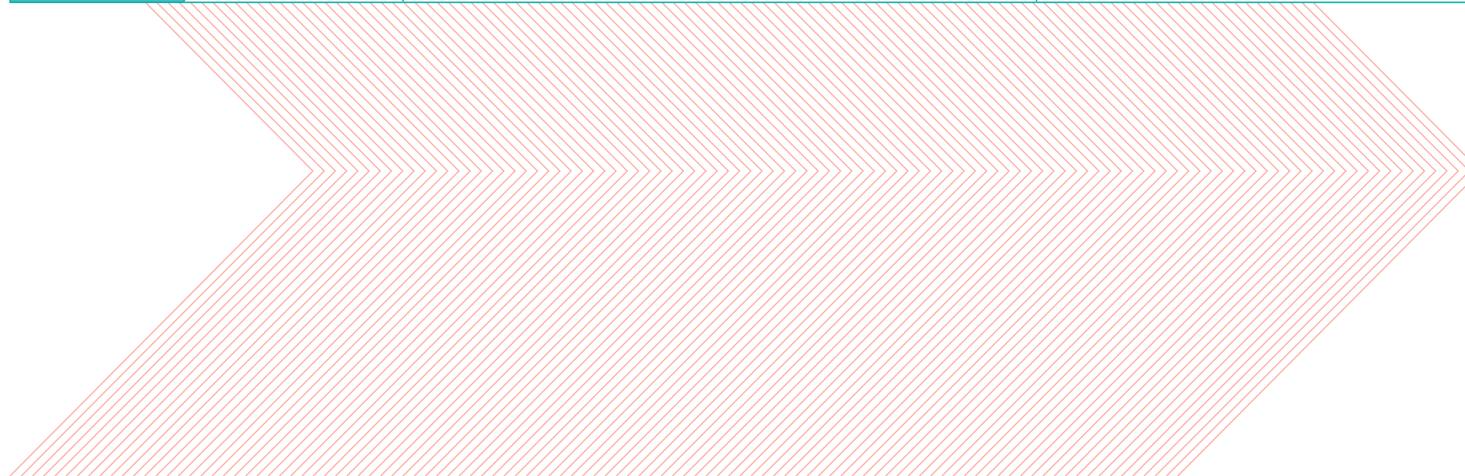There are three types of routes learners can consider:

- Combine work and study

- Study

- Work

| Combine study and work | Apprenticeships | Apprenticeships are real jobs that combine work with training and study. Learners will earn a wage, gain skills and have the opportunity to put what they learn into practice.

To start an apprenticeship, learners need to:
- be 16 or over
- live in England
- not already be in full time education

Learners can apply for an apprenticeship while still at school.

To apply for some apprenticeships, learners might need to have certain qualifications, such as GCSE English or Maths. If there are any additional entry requirements, they will be listed in the apprenticeship application details. | The 4 different apprenticeship qualifications levels are:
- Intermediate: level 2
- Advanced: level 3
- Higher: level 4 or 5
- Degree: level 6 or 7

It takes between 8 months and 5 years to complete an apprenticeship, depending on the level. Find out what qualification levels mean on GOV. UK.

There are over 700 types of apprenticeships in different areas of work.

Here are some possible apprenticeships available to study:
- Trainee Designer
- Room Designer
- Furniture Designer
- Junior CAD Designer
- Games Designer
- Design Operations
- Product Design and development
- Junior Product Design
- Engineer
- Construction | Use these subject-led resources below to encourage your learners to think about apprenticeships related to Product Design.

Resources include:
- Teacher Guide
- Student Activity
- Lesson Slides
- Subject Posters |

| Combine study and work | T levels | A T level takes 2 years and gives a mix of learning in the classroom and a minimum 9-week placement with an employer. This means learners can explore what a real career is like while they study.

To start a T level, learners need to be 16 to 19 years old and live in England.

Schools and colleges set their own entry requirements, so learners need to check their websites to find out what GCSE grades they need. | T levels are level 3 qualifications.

A T level is also worth UCAS points which can be used to apply to university or another type of higher education.

Here are T levels aligned with your subject:
- T level Design and Development for Engineering and Manufacturing
- T level Engineering, Manufacturing, Processing and Control
- T level Craft and Design | Resources for teachers including 'How to talk about T levels', student activities pack, subject leaflets and T levels guide.

T levels resources for teachers and careers advisers - GOV.UK |
|---|---|---|---|---|
| Combine study and work | Vocational Technical Qualifications (VTQs) | VTQs are practical qualifications designed to give the skills and experience needed for a certain job. They might be appropriate if a learner has a strong interest in working in a particular industry. | There are over 2,000 different subjects available across the different VTQs.

There are a few different types and levels of VTQs, including:
- BTEC diplomas: level 1 to 7 qualifications
- Cambridge Nationals: level 1 and 2 qualifications
- Cambridge Technical: level 2 and 3 qualifications
- T levels: level 3 qualifications

Your learners may be able to study:
- Engineering Design and Technology
- Engineering Design
- Digital Media
- Product Design | Find out more about VTQs: Vocational Technical Qualifications (VTQs) | Skills for Careers |

Study	**Higher Technical Qualifications (HTQs)**	HTQs are technical qualifications that employers have helped develop so learners can get the right training and skills needed to succeed at work. HTQs can be studied full time or part time.	HTQs are level 4 and 5 qualifications. They focus on high quality technical skills that are sector specific. There are many different types of approved HTQs, such as: • Higher National Diplomas (level 4) • Higher National Certificates (level 5) • Foundation Degrees (level 5) • Higher Education Diplomas (level 5) It takes 1 to 2 years to complete an HTQ, depending on the course taken. Here are some relevant HTQs to your subject: • Engineering and manufacturing • Construction and the built environment • Business Management	Find out more about HTQs: Higher technical qualifications (HTQs) | Skills for Careers
	A-Levels	A-Levels are subject-based qualifications usually taught in classrooms and assessed by exams.	Here are some relevant A-Levels to your subject: • Art and Design • D&T Product Design • D&T Engineering Design	Find out more about A-Levels: A-Levels | Skills for Careers

Study	**Higher Education**	Higher education courses are usually taught in universities or specialist colleges, like art schools. Learners can often study flexibly at their own pace by learning online or part time.	Learners can choose from many different types of higher education courses, such as: • Diplomas • Bachelor's Degrees • Foundation Degrees • Higher Technical Qualifications (HTQs) • Degree Level Apprenticeships	Explore undergraduate courses in Product Design: • 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 Product Design Subject Guide: Product Design UCAS Subject Guide

Interested in University league tables?

You can see at a glance the university ranking for Product Design.

The table allows you to filter the top university by each category:

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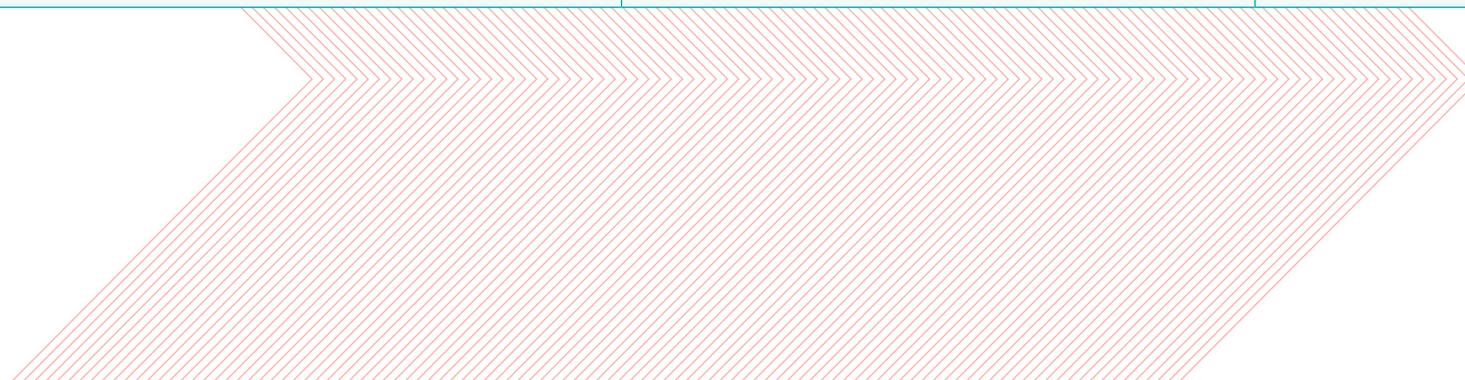• Research quality
• Research intensity
• Graduate prospects

More information on Universities: Interested to see course level data? Discover Uni includes official statistics about higher education courses taken from national surveys and data collected from universities and colleges about all their students.

You can search, save and compare courses using the course comparison tool.

The data includes:

• Entry information, highlighting the qualifications held and UCAS Tariff point values students had when they were accepted onto the course.
• Continuation rates for courses and a breakdown of what students are doing after one year on the course.
• Data from the National Student Survey (NSS) showing experiences at university or college.
• Data from the Graduate Outcomes survey showing employment outcomes and earnings which we publish along with earnings data for graduates 3 and 5 years after graduation from the Longitudinal Education Outcomes (LEO) dataset.
• Graduates' perceptions of their work after graduating.

Work	Supported internships for young people with an Education, Health and Care Plan	A supported internship is an unpaid, work-based study programme designed for young people with an Education, Health and Care (EHC) plan. It helps them take their first step from education into the workplace, while developing the skills needed to move into paid employment. To be eligible for a supported internship, a young person must be aged 16 to 24 and have an Education, Health and Care (EHC) plan.	Supported interns spend most of their time in the workplace, developing the practical skills needed for employment. A supported internship typically includes: • An unpaid work placement lasting at least six months • Support from a qualified job coach • A personalised study programme, which includes English and maths where appropriate	You can get help and advice from: • Disability Rights UK: information, advice and resources for disabled students. • Preparing for Adulthood: guidance on supported internships and study programmes for young people with a disability or learning difficulty. • This suite of resources including FREE Parental Engagement CPD, supports parents and carers to have. constructive careers and education conversations as well as to explore education and career options with their child. • Access to Work: help to find or stay in work if you have a physical or mental health condition, including financial support. Find out more: Supported internships if you have an education, health and care plan | Skills for Careers
	School Leaver Programmes	Some companies offer school leaver schemes to young people who have completed A-Levels. The schemes allow them to learn and train with a large company while earning a wage.	Key features of School Leaver Programmes: • Target Audience: Students aged 16–18 who are leaving school or college • Duration: Usually 1–5 years, depending on the level and employer • Structure: Combines paid work experience with formal training or study (often leading to a qualification) • Qualifications: Can include NVQs, BTECs, or even degree apprenticeships • Industries: Available in finance, law, tech, engineering, retail, healthcare, and more	Example School Leaver Programmes: KPMG, EY, PwC – Business and finance IBM, Capgemini – Technology Rolls-Royce, BAE Systems – Engineering Dentons, CMS – Legal apprenticeships Find out more: School Leaver Programmes | AllAboutSchoolLeavers

💡 Inspiration

- Share your own careers pathway.

- Use CPD resources and access key links to improve your understanding of pathways from your subject.

  › Access our free online 'Understand career pathways' module for teachers: Home - The Careers & Enterprise Academy

  › Key link: Your training options | Skills for Careers

- Encourage learners to research a job related to your subject that they will be doing in ten years' time and ask them to present the pathway they took to that role.

Further information/support

Support your professional growth through careers CPD

As a teacher, you play a vital role in helping learners connect their subject learning to the world beyond the classroom.

Accessing relevant careers CPD ensures you're equipped with the latest insights, tools, and strategies to embed careers meaningfully into your subject.

By engaging in CPD, you can:

- Understand how careers education supports student motivation and engagement.

- Build confidence in having effective careers conversations.

- Enhance the quality of your teaching by linking curriculum content to real-world pathways.

- Stay up to date with labour market trends.

This not only supports your own development but also helps create a dynamic, future-focused curriculum for your learners.

Free online CPD modules from The Careers & Enterprise Academy

- Teachers Part 1: Understanding Career Pathways

- Teachers Part 2: Careers in the Curriculum Awareness

- SENCO: Understanding Pathways and Career Opportunities

- Wider Education Workforce: Careers Conversations

Access modules here: The Careers & Enterprise Academy | The Careers and Enterprise Company

These modules will help you:

- Identify where Careers already exists in your subject.

- Make stronger links between your curriculum and the world of work.

- Gain confidence in supporting learners with their next steps.

What are Teacher Encounters and why do they matter?

Teacher Encounters are powerful CPD opportunities that give you direct access to people working in industry.

By spending time with employers, you'll gain up-to-date insights into how your subject connects to real-world careers helping you bring lessons to life and better prepare your learners for the future.

These experiences help you:

- Stay current with industry practices and technical developments.

- Understand the skills, behaviours, and qualifications employers are looking for.

- Discover a range of career pathways, including apprenticeships and vocational routes.

- Build confidence in having meaningful careers conversations with your learners.

Over 3,000 teachers have already taken part, with 91% saying they feel more confident supporting students with career choices, and 78% feeling better equipped to link their subject to the world of work.

How to get involved

There are several easy ways to arrange a Teacher Encounter:

- Reach out to your local Careers Hub: They often have events or connections ready to go.

- Speak with your Careers Leader to identify local employers that could accommodate you and / or your colleagues on a Teacher Encounter. The Careers Leader Guide will provide inspiration and can support in planning a meaningful encounter.

- Contact a local employer directly: If you know a business that could enrich your subject, the Employer Guide can help them shape a meaningful experience.

- Speak with your SLT: Use this messaging to raise awareness of Teacher Encounters as a valuable form of CPD.

Hear from some teachers who recently attended an encounter in the South Downs National Park here or read about how one school have changed their approach to helping teachers develop and apply their learning across the curriculum.

Acknowledgements

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Amazing Apprenticeships

BBC Bitesize

CREST Awards

Education & Employers - icould

MYPATH

National Careers Service

NEON

Skills Builder Partnership

STEM Learning

Prospects

UCAS