

# Exploring Careers Through **Technical** Routes

Construction



## The

The UK construction industry includes a diverse range of projects from simple home repairs e.g. fixing a leak or building an extension to national projects e.g. building a sports stadium such as Wembley, a new hospital or a new underground railway tunnel.

The variety of jobs range from construction project management to craft-based roles. Some examples include: crane or machinery operators; service installers; plumbers; electricians; heating & ventilation engineers; building technicians; CAD operators to produce drawings; building control surveyors; highways maintenance; steeple jacks; tunnel operatives; site inspectors; field technicians; project managers.

You could be based in an office, on site or in a workshop in the UK. Alternatively there are many construction jobs abroad.

## Skills and Requirements

Essentially you will need the ability to get on well with people, enjoy being part of a team and like working outdoors for some of the time.

Additional skills and behaviours required include:

- Being enthusiastic and committed to your work
- Having digital technology knowledge for using computer applications or technical tools
- The ability to read and interpret relevant documents
- Liking building, designing and/or making things
- Working independently to plan, organise and complete daily tasks
- Working with numbers to perform calculations
- Conveying or exchanging information verbally
- An ability to problem solve
- Evaluating information accurately to make decisions
- Working in multi disciplinary teams to ensure tasks are completed in the agreed timeframe
- A thorough knowledge of regulatory requirements
- Commercial awareness to support the business

Many trades require a CSCS card e.g. to get a labourer's

Construction employs around 2.5 million people in the UK - that means that one in every ten jobs is in construction.

They need over 16,000 more people to work in the sector between 2017 and 2021.

Source: CITB

# Exploring Careers Through Technical Routes

Working and Learning in Construction

## Job Roles & Progression

Employers offer work experience that give opportunities to build skills while studying to help you start out in your career e.g. as a construction trainee, a bricklayer or general labourer.

### Study Programme

Levels 2 and 3



### Further study

BSc (Hons)  
Construction Management  
(or with Environment,  
Engineering or Project  
Management)  
Quantity Surveying  
Commercial Management

FdSc  
Building



### Apprenticeships

Intermediate and  
Advanced Construction  
Industries  
(depending on your  
specialism)



### Career roles

Technical and managerial roles  
e.g. Quantity Surveyors, Site  
Managers, Technical Engineers  
and Architects Many people  
become

## Calculation including problem solving

### Tasks

1. Mix materials in the correct proportions for building a wall according to the customer's requirements.
2. Calculate the costs of labour, materials and VAT to produce a customer quotation.
3. Accurately calculate materials required for hard landscaping a garden from a scaled drawing.
4. Plan and cost out a building project taking into account profit & loss and overheads.
5. Carry out a risk assessment for taking down a disused building.

### Links to GCSE Maths

1. **Number** (whole numbers – addition, multiplication)  
**Ratio, proportion and rates of change** (calculating amounts using proportions, direct and inverse proportion)  
**Geometry and measure** (units of measure)
2. **Ratio, proportion and rates of change** (percentages)  
**Number** (financial maths - VAT)
3. **Geometry and measure** (2-dimensional shapes) **Number** (whole numbers - addition, subtraction, multiplication; decimals - multiplying and dividing decimals)
5. **Probability** (finding probability, relative frequency)

where  
a  
new  
y  
laid  
floor  
is

## Communication, all

### Tasks

1. Listen to instructions from a site manager, respond correctly to any questions and carry out instructions accurately.
2. Plan a total house renovation project determining which trade will do what, when and in which order.

breaking  
up.

4. Prepare a client quotation for the installation of a new

kitchen.

5. Read reports from a variety of sources about accidents at work to develop your own staff guidance booklet.

### **Links to GCSE English Language**

1. **Spoken language** (speaking and listening – audience, purpose, discussion skills)

2. **Writing** (planning – mind map, table)

3. **Writing** (writing non-fiction – text)

**Spelling, punctuation and grammar** (common spelling errors)

4. **Writing** (writing non-fiction – quotation; organising information and ideas)

5. **Analysing non-fiction** (information)  
Comparing texts (comparing by purpose, structure a comparison response)

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