

Exploring Careers Through Technical Routes

Construction



The Industry

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.

Agency Central
www.agencycentral.co.uk
 CITB www.citb.co.uk/careers-in-construction

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 card you need to have passed a course in Health & Safety in a Construction Environment.

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

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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
Construction, Multi Trades,
Bricklaying etc.



Further study

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

FdSc

Building Technology
Construction
Architectural Technology



Apprenticeships

Intermediate and Advanced
Construction Industries
(depending on your specialism)

Higher
Sustainable Built Environment



Career roles

Technical and managerial roles e.g.
Quantity Surveyors, Site Managers,
Technical Engineers and Architects
Many people become
self-employed or run their own
business.

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)
4. **Number** (financial mathematics - profit and loss)
5. **Probability** (finding probability, relative frequency)

Communication, all forms

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.
3. Read and respond to a complaint from a hotel where a newly laid floor is 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)