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.

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
### 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

#### 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)
2. **Ratio, proportion and rates of change** (calculating amounts using proportions, direct and inverse proportion)
3. **Geometry and measure** (units of measure)
4. **Ratio, proportion and rates of change** (percentages)
5. **Number** (financial maths - VAT)

#### 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.

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**Links to GCSE Maths**
- **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)
- **Ratio, proportion and rates of change** (percentages)
- **Number** (financial maths - VAT)

**Communication, all**
- **Number** (financial maths - VAT)
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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