

# 10<sup>th</sup> February 2020 – Career of the Week

## Civil Engineer (Engineering Consultant)

Design & manage construction projects, from bridges & buildings to transport links & sports stadiums.

**National Careers Service**

[www.nationalcareersservice.direct.gov.uk](http://www.nationalcareersservice.direct.gov.uk)



### Entry Requirements

You can get into this job through a university course, a college course, an apprenticeship, working towards this role.

#### University

You can do a foundation degree, higher national diploma or degree in civil engineering.

Many universities specialise in particular areas of civil engineering, like:

- structural engineering
- environmental engineering
- coastal engineering

Some courses include a work placement, which can be useful for making industry contacts to help find work after you finish your studies.

You can apply for a postgraduate master's award in civil engineering if you've got a related degree like maths, science or geology.

Entry requirements - You'll usually need:

- 2 or 3 A levels, or equivalent, including maths and a science for a degree
- a degree in a relevant subject for postgraduate study

#### College

You can take a higher national certificate (HNC) or diploma (HND) at college, which may help you to find work as a trainee engineer. You'll do further training on the job to qualify.

Subjects include:

- Level 4 HNC in Civil Engineering
- Level 5 HND in Construction and the Built Environment

Entry requirements - You'll usually need:

- 1 or 2 A levels, or equivalent, for a higher national certificate or higher national diploma

#### Apprenticeship

You could complete a civil engineer degree apprenticeship.

Entry requirements - You'll usually need:

- 4 or 5 GCSEs at grades 9 to 4 (A\* to C) and A levels, or equivalent, for a higher or degree apprenticeship

#### Work

You could start as a civil engineering technician and study part time for a degree while you work.

**What you'll do** Depending on your specialism, you could be:

- planning with the client
- analysing surveys, testing and mapping data using computer modelling software
- creating blueprints using computer aided design (CAD)
- judging if projects are worth doing by looking at costs, time and labour
- checking risks and the effects on the environment
- preparing bids for tenders, and reporting to clients and government agencies
- managing and checking progress at each stage
- making sure sites follow health and safety rules

#### More information

Professional and industry bodies.

You can join the [Institution of Civil Engineers](#) for professional development opportunities.

#### Further information

You can find out more about becoming a civil engineer from the [Institution of Civil Engineers](#) and [Tomorrow's Engineers](#).

#### **Skills Required – You'll need:**

- knowledge of engineering science and technology
- maths knowledge
- knowledge of building and construction
- design skills and knowledge
- excellent verbal communication skills
- knowledge of English language
- thinking and reasoning skills
- the ability to read English
- to be able to use a computer and the main software packages competently

#### **Related Careers**

- Civil engineering technician
- Hydrologist
- Land surveyor
- Construction manager
- Architect

#### **Salary**

**These figures are a guide.**

Starter: £ 24, 000

Experienced: £ 80, 000

#### **Working Hours**

Typical hours – 40 to 42 hours per week.  
You could work evenings and weekends.

#### **Working Environment**

You could work on a construction site or in an office.

Your working environment may be outdoors in all weathers.

You may need to wear protective clothing.

#### **Career paths and progression**

With incorporated or chartered engineer status, you could move into senior project management roles. You could also specialise in a particular engineering field, work in research or become a consultant. You could work overseas with British consulting firms, and for oil and mining companies.

You could also work for international development and disaster relief agencies.

What is labour market information?

**Labour Market Information (LMI)** is the name for facts and figures about jobs and employment.

The information is used to give an overall picture of the past, present and future of work.

The **labour market** is the term used to describe the amount of people working and looking for work, and the amount of jobs.

#### **Labour Market Information**

In **North West England** there are currently 8786 Civil Engineers in employment.

[www.icould.com](http://www.icould.com)