

# **Civil Engineer**

Civil engineers design and supervise large construction projects which support our transport systems, cities and homes.

They need to have key skills to turn ideas into reality.

#### THE ROLE

As designers and innovators, civil engineers create things that didn't exist before and do things in new and exciting ways to improve the systems around us. They find ways of recycling our waste, and finding solutions to problems like pollution.

To be a civil engineer you will need to be good at working as part of a team and have the skills to communicate your ideas, designs and thoughts as well as listening to clients and other members of engineering teams.

#### **PROJECT OPPORTUNITIES**

- Structural bridges, dams, offshore platforms and pipelines
- Transportation roads, railways, canals and airports
- Environmental water supply networks, drainage and flood barriers
- Maritime ports, harbours and sea defences
- Geotechnical mining, dams, earthworks and construction foundations

## SALARY EXPECTATIONS

A civil engineer trainee can earn between £12,000 and £16,000 a year

A graduate engineer can earn between £22,000 and £28,000 a year

Senior civil engineer can earn between £40,000 and £50,000 a year

#### **CAREER PROGRESSION**

GRADUATE ENGINEER

**ENGINEER** 

SENIOR ENGINEER PRINCIPLE ENGINEER

### **Civil Engineer**

#### **ENTRY ROUTE**

- Bachelor's degree or Master's degree in Civil Engineering.
- A good understanding of maths and science
- An eye for design and a mind for critical thinking - design is not just looking good, it has to be fit for purpose. The process of a build can involve a lot of problem solving to get to the perfect design for the client
- The ability to communicate effectively.
   Often you will have to liaise with the client, statutory bodies, professional bodies, contractors, general public and many others to get the build right for everyone
- Organisational skills, and working to deadlines are very important

## TYPICAL TASKS FOR A CIVIL ENGINEER:

- Design work and using Computer Aided Design (CAD) and Building Information Management (BIM)
- Critically judging costs, time and labour requirements
- Managing and monitoring progress during a project
- Data Analysis
- Site surveys, testing and mapping data
- Assessing for environmental impact and risks

For more information on becoming a civil engineer visit:

www.goconstruct.org www.citb.co.uk or talk to your local college

## Your career journey starts here!

