

Mersey Gateway Project

# THINKING ABOUT BEING A CIVIL ENGINEER?

## WHAT DOES A CIVIL ENGINEER DO?

As a civil engineer you would plan, design and manage a variety of construction projects. You could work on everything from bridges and tall buildings to transport links and sports stadia. If you are interested in designing and building things then this job could be ideal for you.

To become a civil engineer you will need excellent maths and IT skills. You'll also need to be able to explain design ideas clearly and be well organised. Before you start in this job you would normally need to complete a degree or postgraduate master's degree in civil engineering.

### Your duties may include:

- Planning requirements with the client and colleagues
- Analysing survey, testing and mapping data using computer modelling software
- Creating blueprints using computer aided design (CAD)
- Judging whether projects are feasible by looking at costs, time and labour requirements
- Assessing the environmental impact and risks connected to projects
- Preparing bids for tenders, and reporting to clients, public agencies and planning organisations
- Managing, directing and monitoring progress during each stage of a project
- Making sure that sites meet legal guidelines, and health and safety requirements.

You would normally work on projects alongside other professionals, such as architects, surveyors and building contractors.

## WHAT ARE THE WORKING CONDITIONS?

Working hours are typically Monday to Friday, 35 – 40 hours per week. You may also have to provide out-of-hours cover to deal with any problems. Your time would be split between an office and the project site. Site work would be in all weathers and may involve a lot of travel. Depending on the contract, you may sometimes need to travel overseas.

## WHAT SALARY COULD I EXPECT TO RECEIVE?

Graduate salaries are between £17,000 and £25,000 a year. Experienced engineers earn between £25,000 and £40,000 a year and senior Chartered Engineers can earn between £50,000 and £80,000 a year.

[INFO@MERSEYLINK.COM](mailto:INFO@MERSEYLINK.COM)

[WWW.MERSEYGATEWAY.CO.UK/MERSEYLINK](http://WWW.MERSEYGATEWAY.CO.UK/MERSEYLINK)

## WHAT SKILLS AND KNOWLEDGE WILL I NEED?

- Excellent maths, science, and IT skills
- The ability to explain design ideas and plans clearly
- The ability to analyse large amounts of data, and assess solutions
- A confident decision-making ability
- Excellent communication skills
- Project management skills
- The ability to work within budgets and to deadlines
- Good teamwork skills
- Full knowledge of relevant legal regulations

## WHAT QUALIFICATIONS AND EXPERIENCE WILL I NEED?

- **Five GCSEs (A-C) and two or three A levels, including maths and a science subject (normally physics)**
- **Access to Higher Education or Level 3 Diploma in Engineering**
- **Bachelor of Engineering (BEng) Degree or a Master's (MEng) Degree in Civil Engineering**

## FOR FURTHER INFO:

[www.apprenticeships.org.uk](http://www.apprenticeships.org.uk)

[www.ice.org.uk/education](http://www.ice.org.uk/education)

[www.engc.org.uk](http://www.engc.org.uk)