

Civil Engineering and Highways Maintenance

What you'll do as a Civil Engineer

Civil engineers design and manage construction projects such as buildings, bridges, transport links and sports stadiums.

As a Civil Engineer you could:

- work closely with clients to understand what they need
- map and analyse data using mathematical modelling methods
- create design plans and models with computer software
- assess the risks and environmental impact of projects
- monitor progress at each construction stage
- lead a team of engineers, co-ordinate work and manage a budget

What you'll do as a Highways Maintenance Skilled Operative

Highways Maintenance Skilled Operatives work on rural and urban roads to repair damaged surfaces.

As a Highways Maintenance Skilled Operative, you could:

- work as part of a team, using hand and power tools to repair surfaces
- interpret and work to drawings
- use equipment to locate buried water, gas or sewer lines

Working Environment

You could work on a construction site or in an office. Your working environment may be outdoors in all weathers.

How Will I Study?

You'll typically spend one day a week in a Gen2 Skills Centre for teaching and support sessions. You'll spend the rest of the time at your workplace.

Skills and Knowledge

You'll need:

- maths knowledge
- design skills and knowledge
- thinking and reasoning skills
- complex problem-solving skills
- to be thorough and pay attention to detail
- excellent verbal communication skills
- to be able to work as part of a team

Entry Requirements

You'll usually need:

5 GCSEs at grades 9 to 4 (A* to C), or equivalent, including English and Maths, for an advanced apprenticeship.



Duration

Highways Maintenance Skilled Operative: 18 months plus End Point Assessment Civil Engineering Technician: 36 months plus End Point Assessment

Next Steps

Following on from your apprenticeship you can move onto an Advanced or Higher-level apprenticeship.

Gen2 Apprenticeships

Highways Maintenance Skilled Operative Level 2 Intermediate Apprenticeship Civil Engineering Technician Level 3 Advanced Apprenticeship