



Environmental Engineer

managing and reducing waste, minimising pollution in order to protect, restore and preserve the planet



Occupational Video - Environmental Engineer

Entry requirements:

Engineering degrees are highly relevant for this area of work. However, you don't always need to have studied an engineering subject to become an environmental engineer. You may have studied another subject that has relevance, such as a science or an environmental discipline. Subjects may include:

- chemistry
- environmental science
- geology
- geoscience
- geotechnical engineering
- maths
- physics.

It may also be possible to move into environmental engineering from other related occupations, such as environmental consultancy or sustainability.

Graduate schemes are offered by some large employers in areas such as engineering and construction.

Although you don't usually need a postgraduate qualification, a Masters in areas such as environmental monitoring, contaminated land or environmental engineering may make you more attractive to an employer.

Skills required:

You will need to be:

- good at collecting, analysing and manipulating scientific data
- strong at report writing and interpreting reports written by other people
- a good communicator, for discussing problems with other professionals
- able to meet strict project deadlines and work under pressure
- a great organiser, to manage all the different phases of a project
- able to work with people from a range of disciplines and to collaborate towards a common goal
- technically inquisitive, with imaginative problem-solving skills
- confident to ask questions and challenge the norm.

What you will earn:

- Starting salaries for environmental engineers are typically between £18,000 and £28,000.
- Experienced engineers can earn between £28,000 and £45,000.
- Salaries for project engineering managers or chartered engineers typically range from £40,000 to £60,000 or more.

Salaries vary depending on a range of factors including the size and type of organisation you work for, your location, skills and experience, and whether you have chartership.

What you will do:

- gather data from a range of sources through site assessments, environmental monitoring and third party reports
- evaluate the environmental impact of the project, hazard or commercial operation
- write up and present findings, costings, health and safety plans and recommendations on the containment, clean-up process, remediation, recycling and waste disposal, in order to fix environmental issues
- create plans to protect and restore the environment by removing contaminants from water, air and land
- develop site-specific health and safety protocols such as spill contingency plans or methods for loading and transporting raw materials
- provide advice about preventing future difficulties
- implement, manage and supervise the day-to-day tasks of construction and remediation schemes
- communicate with sensitive stakeholders such as local residents in order to minimise the impacts of projects on the community
- regularly liaise with clients and local authorities relating to planning aspects of projects
- provide advice to and work alongside other professionals, such as environmental scientists, planners, construction workers, lawyers and landowners to address environmental problems and promote environmental sustainability
- be familiar with current environmental regulations and guidance.

Working hours and environment:

As environmental engineering often requires a lot of site work and travel, hours can be irregular. You may be expected to stay away from home overnight, or sometimes for longer, perhaps weeks or even months, depending on the project.

Most environmental engineers work full time and you'll usually be expected to work around 40 hours per week. There may be times where your working hours are longer, in the case of environmental emergencies. Project deadlines could also require you to work extra hours, but these will usually be repaid in lieu or you may receive additional payment.

Career path and progression:

Many organisations offer training once you begin working, which will be linked to the specific area of environmental engineering you have chosen.

You may receive training in areas such as:

- climatic environmental testing
- Phase 1 and Phase 2 Site Investigation reports
- Building Research Establishment Environmental Assessment Method (BREEAM), Passivhaus and other environmental assessment methodologies
- creating Construction Environmental Management Plans (CEMP) and Construction Environmental Control Plans (CECP).