



Hydrologist

Hydrologists study rainfall, rivers and groundwater systems to help develop sustainable ways of managing water.

What does the job involve?

As a hydrologist, you could:

- investigate the causes and impact of flooding and drought
- study snowfall, glaciers and ice formation
- use data about rivers, rain and floods to predict and manage risks
- analyse water samples for chemicals and pollutants
- work on engineering projects like dams, drains and flood defences
- advise policy makers on sustainable water use

Working environment

You could work in an office, in a laboratory or in the countryside.

Your working environment may be outdoors in all weathers.

Routes and choices while at school:

You will need to try to get at least four or more GCSEs at grades 9 to 4 (A* to C), or equivalent qualifications. These should include English, Science and maths. Other relevant subjects include Geography, IT and Biology.



Skills You'll need:

- maths knowledge
- knowledge of engineering science and technology
- knowledge of geography
- analytical thinking skills
- knowledge of chemistry for analysing water samples
- to be thorough and pay attention to detail
- the ability to think clearly using logic and reasoning
- excellent written communication skills
- to have a thorough understanding of computer systems and applications



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How to get into this role:

You can get into this job through:

- a university course
- an apprenticeship
- working towards this role

University

You'll need a first degree, and often postgraduate training, to get into hydrology. Degrees include:

- environmental science
- geography
- civil engineering
- environmental engineering
- Earth sciences
- ecology

Postgraduate courses

After finishing your degree, you could complete a postgraduate course. You can [find postgraduate courses through the British Hydrological Society](#).

Apprenticeship

You could do an Environmental Practitioner Level 6 Degree Apprenticeship before specialising in hydrology.

This can take up to 5 years to complete and is a mix of learning on the job and studying at an approved university.

Entry requirements

Employers will set their own entry requirements.

Further information

Career tips

You can [learn about the different types of hydrology work](#) through the British Hydrological Society.

You can also [find out more about being a hydrologist](#) from The Geological Society.



Career path and progression

- You could become a senior hydrologist, managing a team of researchers, hydrologists and engineers.
- You might also work as a consultant, advising government departments, charities and commercial companies on:
 - sustainable water use
 - water engineering projects
 - flood risk management
 - international development projects and emergency relief
- You could also go into academic research or lecturing in your specialist field.

Rates of Pay

Starting salaries typically range from £18,000 to £25,000. With experience, more senior hydrologists can earn £45,000