

Surveyor - Hydrographic

A hydrographic surveyor measures and maps marine environments, such as rivers, lakes and oceans. They can be involved in work such as installing oil rigs and docks, renewable energy technology and environmental research. They are also known as hydrographers.

The Work

You could be:

- carrying out geotechnical, geophysical and hydrographic surveying
- possibly using traditional equipment such as theodolites, but, more probably, using advanced technology such as satellite, laser scanners, sonar and geographical information systems (GIS)
- producing accurate charts of the marine environments, locating rocks, sandbanks and possible obstructions
- planning routes over areas that may never have been surveyed before and advising on the direction and speed vessels should travel at
- monitoring the installation of rigs, docks, seabed cables, offshore wind farms and other structures
- carrying out calculations, measuring distances, depths and bearings
- writing reports about the operation offshore for the management onshore
- managing projects and dealing with clients and other professionals.

Pay

The figures below are only a guide. Actual pay rates may vary, depending on:

- where you work
- the size of company or organisation you work for
- the demand for the job.

Pay rates for hydrographic surveyors could start in the region of £20,000 to £25,000 a year. Senior surveyors can earn between £25,000 and £45,000 a year while high earners may earn up to £55,000 a year or more.

You may also earn extra for time spent working offshore.

Conditions

- You may work offshore, based on a rig or survey vessel, spending long periods away from home.
- You may be based onshore, but go out in boats on a regular basis.
- You might work all over the world, including unpopulated regions and regions where the climate is extreme.
- The usual working pattern for those working offshore is 12-hour shifts.
- On oilrigs it can be cold, wet and stormy, so you will wear protective clothing such as gloves, safety boots and a hard hat.
- Getting around on oil rigs involves climbing ladders.

- The living and working conditions may be cramped.

Getting In

You gain chartered or associate status by following one of the routes approved by the [Royal Institution of Chartered Surveyors](#) (RICS).

- Studying a degree accredited by RICS in a surveying science subject such as hydrographic surveying, land surveying, geology, geography or geophysics, followed by a period of supervised practical training (Assessment of Professional Competence).
- If your degree is not RICS-accredited, you can do an accredited postgraduate qualification.
- University of Glasgow offers a postgraduate MSc in Geospatial and Mapping Sciences (SCQF Level 11). You will need a good Honours degree in a relevant discipline for entry.
- You could enter a job with some subjects at National 5 and Highers and train on the job towards the AssocRICS qualification (associate member of RICS) for 4 years.
- Alternatively, if you have an HNC (SCQF Level 7) or HND (SCQF Level 8) you could get a trainee job and work towards RICS associate membership with two years of supervised training.
- Entry requirements for an HND are 2 Highers, and for a degree, 4 Highers. English and Maths are preferred.

In addition to the above:

- to work offshore you must pass a medical examination every 2 years
- you must also pass an offshore survival course such as the Basic Offshore Safety Induction and Emergency Training Certificate (BOSIET).

Offshore surveyors work mostly for the oil and gas industries. These companies operate on a global scale, with bases all over the world. Other possible employers include offshore survey companies, government agencies, port and harbour authorities, water companies and civil engineering firms.

What Does It Take

You need:

- accuracy and attention to detail
- excellent concentration, to ensure the quality of work and safety of personnel
- good problem solving skills
- good IT skills and ability to use specialist software
- the ability to work closely in a team and get along with a wide range of people
- good communication skills and an awareness of other cultures
- self-motivation for keeping up with research
- an open approach to learning new skills
- decisiveness and assertiveness.

Training

- Once you have completed an accredited degree you would find employment as a trainee surveyor.
- To qualify as a chartered surveyor you would complete your Assessment of Professional Competence (APC) which is 24 months of structured training, consisting of on the job learning and assessment. This leads to RICS membership and the status of chartered surveyor.
- Chartered Surveyors have to complete at least 20 hours continued professional development (CPD) every year.

Getting On

- You might move eventually into management or consultancy work, probably onshore.
- It is likely that you will need to work abroad to gain promotion and experience.

More Information

For more information please organisations listed below:

- [Survey Association](#) (TSA)
- [Society for Underwater Technology](#) (SUT)

Contacts

GoConstruct

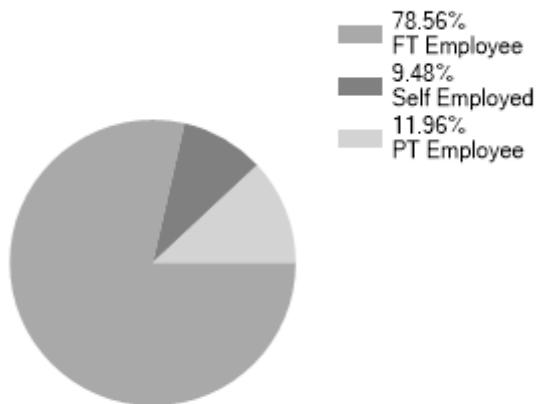
Website: www.goconstruct.org

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Statistics

Employment Status UK %

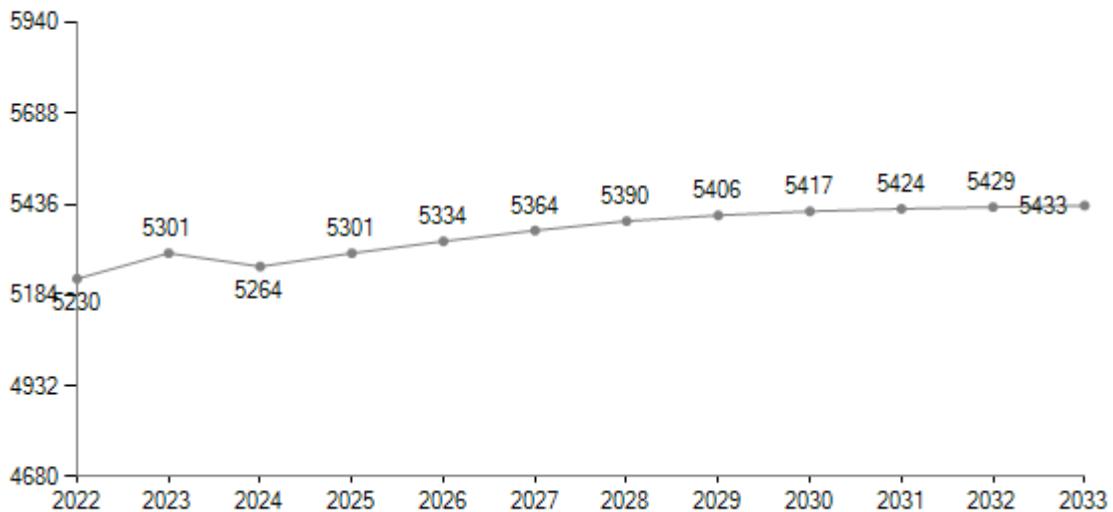


Past Unemployment - Scotland

No Claimant statistics available for Scotland.

LMI data powered by [LMI for All](#)

Predicted Employment in Scotland



LMI data powered by [Lightcast](#)