Surveyor - Land or Geomatics

A land or geomatics surveyor, also known as a geospatial surveyor, measures and charts the earth’s physical and man-made features to collect a range of data. This data is then used by professionals such as cartographers, planners and builders for a number of purposes. This includes development planning and environmental studies.

The Work

You could be:

- measuring all aspects of the area using digital technology, as well as traditional instruments such as a theodolite
- conducting environmental impact, measured building and elevational surveys to check if a site is suitable for proposed plans
- using a global positioning system (GPS) and geographic information system (GIS) to plot coordinates and gather data on the features, such as rivers and roads, of a site
- using computer-aided design (CAD) software to make 2D and 3D models of the plans
- locating and mapping underground features such as gas pipes, water cables and electricity cables
- measuring both large and small-scale distances – sometimes to either the nearest kilometre, or micron
- using information from other sources such as aerial photography, satellite surveys and laser scanning
- monitoring changes in land movement caused by both man-made and natural effects
- analysing and interpreting complex data and writing reports.

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.

Starting salaries for graduate land surveyors is around £18,000 to £22,000 a year. With experience this can range between £24,000 and £40,000 a year, while senior or head surveyors can earn between £45,000 and £60,000 a year. You may get extra allowances for working overseas.

Conditions

Conditions vary widely.

- You might be based in an office and travel to sites or you could be based on site, maybe in a remote area, for a period of time.
- Your working hours could involve early rises, irregular shifts, nights or weekend work, or weeks away from home.
- At times, you work outside in all weathers.
- You would sometimes have to wear safety gear, for example a hard hat.
**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 subject such as geomatics, geographic information science or surveying and mapping science, 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.
- The Universities of Aberdeen and Glasgow offer suitable MSc degrees.
- You can enter a job with some subjects at National 5 and Highers and train on the job for the AssocRICS qualification (associate member of RICS) for 4 years.
- Alternatively, if you have an HNC or HND, you could get a trainee job and work towards RICS associate membership with two years of supervised training.

In addition to the above:

- you usually need a driving licence
- you must be fit enough to climb ladders and hills and scramble over rough ground
- should hold a Construction Skills Certification Scheme (CSCS) card or equivalent, to work on building sites. You will need to pass a health and safety test to qualify for this scheme.

Look for jobs with government departments such as the Ordnance Survey and Ministry of Defence. Other opportunities are in the oil and gas industry or with large building contractors and civil engineers.

**What Does It Take**

You need to have:

- an accurate and methodical approach
- excellent maths, science and IT skills
- an analytical mind and good problem solving skills
- the ability to interpret graphs and technical data
- good communication and presentation skills
- a knowledge of planning and environmental laws
- an awareness of surveying technology and CAD
- an awareness of health and safety matters.

You need to be able to:

- work alone or as part of a team
- meet deadlines
- make decisions.

**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 20 hours continued professional development (CPD) every year.

**Getting On**

This is a relatively small profession, but it is expanding with the introduction of new technology such as geographic information systems, global navigation systems and satellite technology.

- With experience you might become a self-employed consultant.
- There may be opportunities to work abroad.

**More Information**

The RICS publishes a list of accredited degree and postgraduate courses. The RICS reports that with the changing nature, and greater accuracy, of spatial mapping, there is at present a worldwide demand for land or geomatics surveyors.

**Contacts**

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Past Unemployment - Scotland

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LMI data powered by [EMSJI UK](https://www.emsi-uk.com)

Predicted Employment in Scotland

LMI data powered by [EMSJI UK](https://www.emsi-uk.com)