Statistician

Statisticians collect, analyse and interpret numerical information or data to help forecast developments and make decisions in a wide range of areas. These areas include actuarial work, biometrics, environmental work, forensics, health, housing, economics, insurance, local government, market research, pharmaceuticals, the labour market, teaching and transport.

The Work

You could be:

- deciding after discussion with clients and colleagues what information is needed to carry out a piece of research and selecting the best way to obtain it
- designing appropriate methods of research such as surveys and trials
- carrying out research as part of a team
- devising sets of questions for market researchers to ask members of the public and analysing the results
- calculating and analysing figures on, for example, standard deviation and frequency distribution, using specialist statistical software
- presenting the results orally and using tables, graphs, diagrams, computer models or written reports
- making decisions or predictions based on the results
- advising policy makers of results and decisions.

Pay

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

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

In the Scottish Government, assistant statisticians and statisticians are usually recruited at grade B1 (£32,455–£35,203), B2 (£36,944–£42,244) and B3 (£45,894–£54,952). Senior posts may be higher.

For those on the Civil Service Fast Stream programme with the Government Statistical Service, you will start on £28,000 a year. This rises to between £45,000 and £62,000 a year with experience and promotion.

Conditions

- You would be based in an office and use a computer most of the time.
- Sometimes you might carry out experiments and surveys in other places.
- You may have to travel and a driving licence is useful.
- Hours would usually be regular, but you might have to be flexible to meet your client's needs.
- You may work as part of a team of statisticians.

Getting In

- You usually need a good Honours degree (SCQF Level 10) in statistics or mathematics or a numerate subject such as economics, psychology, geography or operational research. For entry you need 4-5 Highers including Maths, with English at least to National 5.
- The Universities of Edinburgh, Glasgow, St Andrews and Strathclyde offer degree and postgraduate courses that are accredited by the Royal Statistical Society.
- A postgraduate qualification (SCQF Levels 11-12) in statistics is an advantage, and may be necessary when applying for jobs.
- To work as an assistant statistician with the Scottish Government, you require a 2:2 Honours degree in a numerate discipline.

The Government Statistical Service (GSS) is the largest single employer of statisticians, with more than 30 different departments including the Office for National Statistics. The statistics they create go to formulate government policy. They offer a Civil Service Fast Stream programme. For entry you require a 2:1 Honours degree with at least 25% formal statistical training.

The Scottish Government recruits assistant statisticians directly, rather than through the Civil Service Fast Stream. Vacancies are advertised on the Scottish Government website.

What Does It Take

You need to be:

- impartial
- logical and methodical
- able to handle a large amount of complex data and manipulate numbers
- able to process data clearly and accurately
- able to make sound judgements based on the information you have
- willing to use your initiative and work out problems
- able to work under pressure to meet deadlines
- a good team worker.

You should have:

- excellent attention to detail
- good communication skills
- the ability to present findings clearly and concisely
- an enquiring mind
- good IT skills
- a high level of mathematical ability.

Training

- The Civil Service Fast Stream programme lasts for four years.
- You do training on the job specific to the field of work.
- There are a number of short courses in statistical and business intelligence software packages such as SAS,

SPSS, Power BI and Tableau.
- Employers may support part time study for a postgraduate statistics qualification.

Getting On

- You could work as a statistician for the government or for business or industry and you would probably specialise, for example in economics or biometrics.
- With experience and ability, you could move on to senior or management posts.
- You may need to take a postgraduate or professional qualification to progress.
- You can become a member of the RSS. If you have a good Honours degree in statistics and at least 5 years' professional experience you can become a Chartered Statistician (CStat). (If you have a suitable degree but have not yet the required training and experience you can gain Graduate Statistician status).
- You could also work in education, research or consultancy – perhaps being self-employed – and you might be able to work abroad.

More Information

The Statisticians in the Pharmaceuticals Industry website may be of interest and has some downloadable booklets for anyone thinking about a career in statistics in the pharmaceutical industry.

Contacts

Maths Careers (Institute of Mathematics and its Applications)
Website: www.mathscareers.org.uk
X: @MathsCareers
Facebook: www.facebook.com/IMAmaths

Office for National Statistics
Tel: 0345 601 3034
Email: info@ons.gov.uk
Website: www.ons.gov.uk
Website (2): www.ons.gov.uk/aboutus/careers
X: @ONS
Facebook: www.facebook.com/ONS

Royal Statistical Society
Tel: 020 7638 8998
Website: www.rss.org.uk
X: @RoyalStatSoc
Facebook: www.facebook.com/RoyalStatisticalSociety

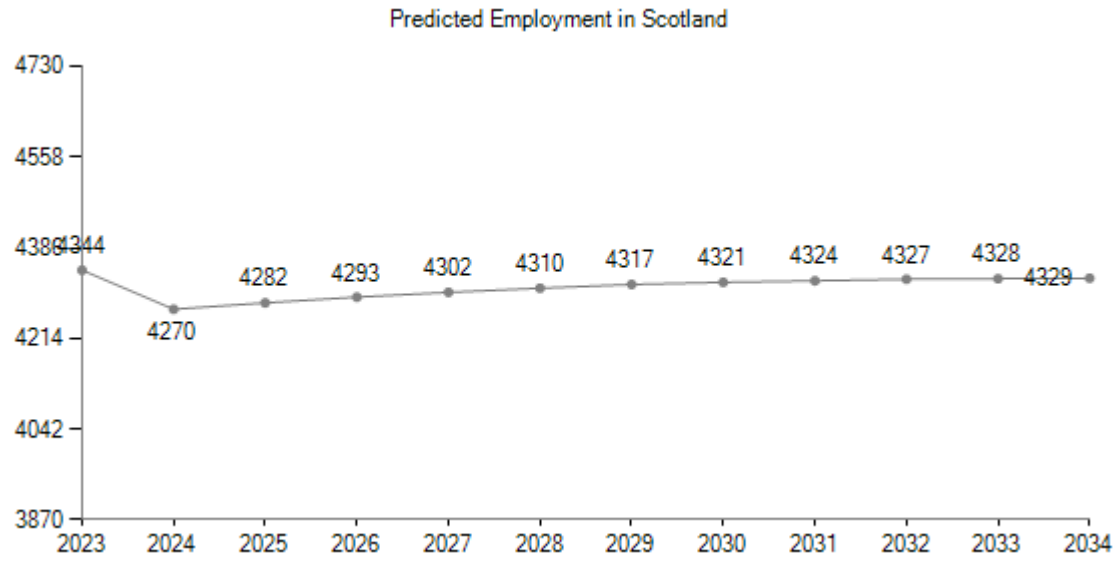
Scottish Government (Statistics)
Website: www.gov.scot/statistics
X: @ScotStat

Statistics

Employment Status : Not available this career.

Past Unemployment - Scotland

No Claimant statistics available for Scotland.



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