

## Data Analyst

Data analysts collect and scrutinise data from numerous sources, such as surveys, sales data or computerised information systems, to identify facts and trends that help businesses to make decisions.

### The Work

You could be:

- identifying and collecting data from different sources
- using database queries to extract information for analysis
- manipulating and linking different data sets in order to analyse the correct data
- checking data quality and removing corrupt data
- using tools and techniques, such as data mining and modelling, to analyse data
- setting up and maintaining automated data queries
- producing reports, graphs and visual presentation of results.

### 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.

Starting salaries may be around £25,000 to £30,000 a year, rising to £40,000 with experience. Senior data analysts can earn £60,000 a year or more.

Data analysts on the Civil Service Fast Stream Digital Scheme or Government Statistical Service Scheme earn £28,000 a year. This rises to between £45,000 and £55,000 a year.

### Conditions

- You would be based in an office and use a computer most of the time.
- Your basic hours would be regular, 9.00am to 5.00pm Monday to Friday.
- You may sometimes need to work late or take work home to meet deadlines.
- You may have to travel and a driving licence is useful.

### Getting In

There are a number of routes into this career.

- Some entrants have a degree (SCQF Levels 9-11) in a numerical subject, such as economics, statistics, mathematics, computer science or information systems. For entry you need 4-5 Highers, usually including Maths, with English at least to National 5.

- If you don't have a relevant degree, you can take a postgraduate (SCQF Level 11) course such as big data, business analytics, data analytics or data science.
- You could enter through the Civil Service Fast Stream Digital Scheme, which is a 3 year programme covering a range of areas, including data analytics. A 2:2 degree in any subject is accepted for entry.
- Another suitable Civil Service Fast Stream is the Government Statistical Service Scheme, which is a 3.5 years programme. For entry you would need a 2:1 Honours degree in a subject containing at least 25% taught statistical content such as Maths, Economics, Sciences, Business Studies, Psychology or Geography.
- See the [Civil Service Fast Stream website](#) for more details of the two programmes mentioned above.
- You may be able to get in through a Modern Apprenticeship in Digital Technology: Data Analytics at SCQF Level 6, or the Technical Apprenticeship at SCQF Level 8. Check the [apprenticeships.scot website](#) for details.

Data analysts can work in a wide range of sectors, including finance, information technology, retail, education, government, healthcare and consulting. Jobs are advertised through recruitment agencies and online on specialist job sites such as [OnlyDataJobs](#).

## What Does It Take

You need to have:

- excellent attention to detail
- strong analytical skills
- a high level of mathematical ability
- good communication skills
- excellent problem solving skills
- good IT skills.

You need to be able to:

- understand and interpret complex data
- work alone and as part of a team
- work to deadlines.

## Training

- If completing the Modern Apprenticeship, you would work towards Diploma in Digital Application Support at SCQF Level 6 and then go onto the Technical Apprenticeship.
- If completing a Technical Apprenticeship, you work towards the Diploma in Digital Technology: Data Analytics at SCQF Level 8.
- You do on the job training specific to the area of work and sector that you work in.
- Training may include courses on data analysis software and tools, data query languages, such as SQL and Oracle, and programming languages, such as Python and MATLAB.
- You might take relevant courses through the [Operational Research Society](#) or the [Royal Statistical Society](#).

## Getting On

- You can do further postgraduate study – it may be required for your job.
- With experience and ability, you could move on to senior or management posts.
- You might move into project management.

## Contacts

## Statistics

Employment Status : Not available this career.

### Past Unemployment - Scotland

No Claimant statistics available for Scotland.

Predicted Employment Statistics : Not available this career.