

## Database Administrator

Database administrators (DBAs) design, manage and update computer databases which store large amounts of information. They are also responsible for the accuracy and security of the database.

### The Work

You could be:

- discussing requirements with clients and producing a specification
- producing data models and physical designs of what database structure (including tables and columns) is required
- monitoring the database performance and checking for errors, such as storage space issues or data inaccuracy
- installing, programming and testing new databases and upgrading existing ones
- writing manuals for users and training staff to use the databases
- setting up user accounts and passwords and ensuring the databases are secure and not at risk from hacking and viruses
- creating back-up and recovery plans to make sure that if the system breaks down data is not lost
- working closely with programmers, IT project managers or web developers
- keeping up to date with data protection laws.

### 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 tend to be around £22,000 to £26,000 a year. With experience earnings can be £35,000 to £50,000 a year or more and at senior level could be up to £60,000 a year or more.

Salaries may include performance-related pay or bonus schemes.

### Conditions

- You work normal office hours from Monday to Friday. You may have to be on call in case of problems out of hours.
- It can be a high-pressure job as many companies rely on the smooth running of IT and databases.
- You may have to do evening or weekend work to meet deadlines or carry out upgrades and maintenance outwith office hours.
- You might have to travel to other companies and spend time away from home.

### Getting In

- Most database administrators have a degree (SCQF Levels 9-11) in a computing subject such as computing science, information technology or software engineering. Entry to most degrees requires 4-5 Highers, usually including Maths.
- Some entrants have a degree in maths or a business subject. Entry requirements are 4-5 Highers, often including Maths.
- If you have a non-computing degree, you can do a postgraduate (SCQF Level 11) computer-related conversion course.
- You need to know how to use structured query language (SQL) and database management systems (DBMS), such as SQLServer, Oracle and Sybase (there are many more).
- You might get in with a HND (SCQF Level 8) in a computing subject on a company training scheme. You usually need 2 Highers for entry to an HND course.
- You might get in through a Modern Apprenticeship in IT and Telecommunications at SCQF Level 6, then work your way up with experience and further specialist training, or a Technical Apprenticeship at SCQF Level 8.
- Studying for a relevant Foundation Apprenticeship while in fifth and sixth year at school could count towards entry of a course or apprenticeship. Entry requirements vary between colleges, but you usually require some subjects at National 5 including English and Maths.
- You will sometimes start off working in systems programming or design (see the job profile for [Software Engineer or Developer](#)).
- For some jobs a driving licence may be essential.

Jobs are in the technical departments of all sectors in industry and commerce: banks, building societies, computer and telecommunications companies, hospitals, insurance companies, retail, transport, central and local government, colleges and universities.

Job opportunities are good, but entry is competitive.

## What Does It Take

You need to have:

- broad technical knowledge
- good communication skills
- an analytical and methodical approach
- an understanding of data query languages, such as T-SQL and PL/SQL
- good organisational skills
- excellent problem solving skills
- good negotiating and team working skills.

You need to be able to:

- work under pressure, make decisions and meet deadlines
- understand the client's business
- keep up to date with new developments
- understand information legislation such as the Data Protection Act.

## Training

- Training can be on the job with part time study.
- [BCS, The Chartered Institute for IT](#) offers a number of different qualifications.
- It helps to have training and skills in SQL Server, Oracle or Unix.
- There are qualifications available through software development companies.
- There are professional certification schemes available, such as Microsoft Certified Solutions Expert: Data Platform or Business Intelligence, and Oracle Database certification.

## Getting On

- You might move into project management.
- You could become manager of a technical department.
- You could work as a freelance consultant.

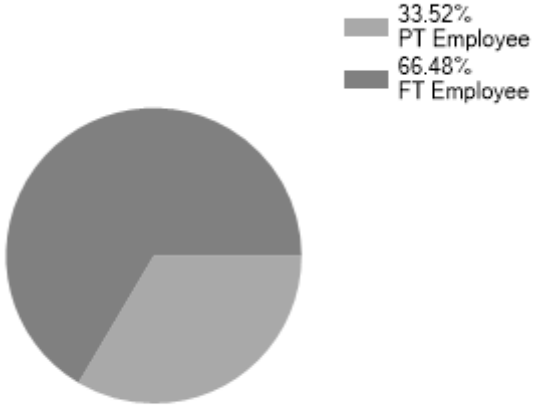
## More Information

If you are considering a career in IT why not take a look at the [Tech Future Careers](#) website. You will find the video case studies of workers and general information on the industry useful.

## Contacts

Statistics

Employment Status UK %

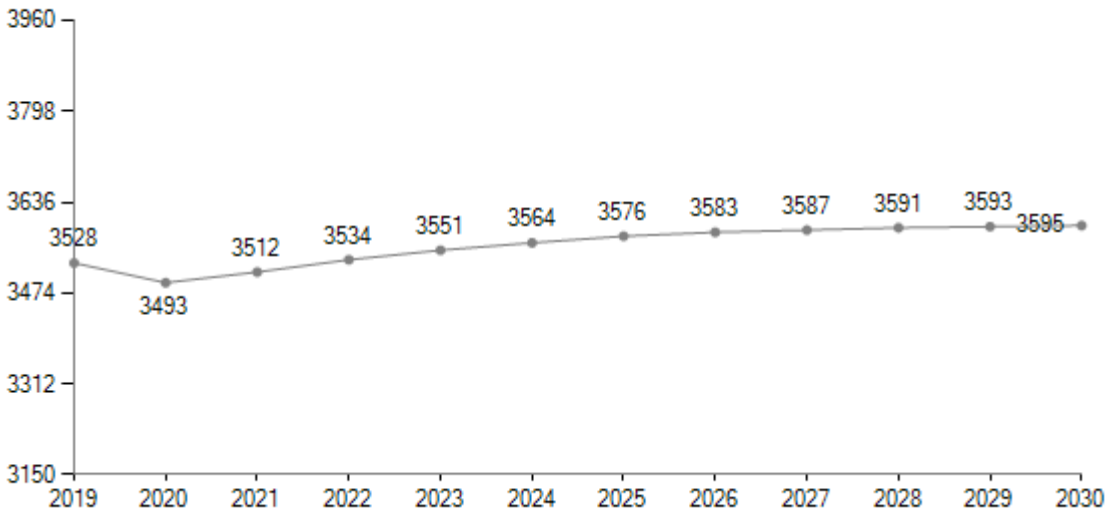


Past Unemployment - Scotland

No Claimant statistics available for Scotland.

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

Predicted Employment in Scotland



LMI data powered by [EMSI UK](#)