

Air Conditioning Engineer

Air conditioning engineers install, repair and maintain air control systems that regulate temperature and air quality in offices, schools, hospitals, shopping centres and other buildings.

The Work

You could be:

- working on different types of air conditioning systems such as VRV (Variable Refrigerant Volume), VRF (Variable Refrigerant Flow), multi-deck and split systems
- visiting and surveying the premises where an air conditioning system is to be installed
- producing an estimate for the cost of constructing and installing the system
- ordering and buying in materials – copper, plastic and steel
- organising the craft workers and supervising them
- diagnosing and fixing faults if equipment does not work properly
- when installation is complete, carrying out quality inspection and tests
- doing regular service checks of the systems.

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.

The starting salary for a Modern Apprentice is often based on the National Minimum Wage (NMW), but some employers may offer a higher salary. The apprentice rate, for those aged under 19 or aged 19 or over and in the first year of their apprenticeship, is £5.28 an hour (1 April 2023).

After training, air conditioning engineers can earn around £23,000 a year. With experience salaries are usually between £25,000 and £35,000 a year.

Overtime and call-out charges can increase this.

Conditions

- You could be working in people's homes or in offices, large stores or supermarkets, where air conditioning systems regulate the air quality and temperature.
- You could also be working in factories and other industrial premises with systems which control heat, dust and humidity levels.
- You would travel to different sites.
- You may have to work overtime and answer emergency calls out-of-hours.
- You have to wear protective gear: goggles, hard hat, safety boots and overalls.

- You might work in different parts of the country, spending long periods away from home.

Getting In

- You would usually enter through a Modern Apprenticeship in Heating, Ventilating, Air Conditioning and Refrigeration at SCQF Level 6, combining on the job training and block release study at college.
- Most employers look for up to 4 subjects at National 5 including English, Maths and a science and technological subject. There is normally a pre-entry test.
- In the UK, air conditioning engineers must hold a current F Gas Certificate. There are three options for individual certification: City and Guilds, BESA accredited course or LCL Awards. These are offered in various locations.
- You need to have a Construction Skills Certification Scheme (CSCS) card or equivalent to work on sites.
- A driving licence is usually essential.
- You will require a satisfactory criminal record check from Disclosure Scotland to show that you are suitable for this type of work. Contact Disclosure Scotland for details on the type you would need.

There are jobs with small firms which install domestic systems as well as with specialist building services and engineering firms which carry out work for large construction companies and for local authority departments. Look for vacancies in the Jobcentre Plus offices or on [Find a Job](#) website, in the local press and in specialist trade journals such as [Refrigeration and Air Conditioning magazine](#).

What Does It Take

You need:

- practical and technical skills
- ability in calculating figures and costs
- ability to read plans and technical drawings
- an understanding of health and safety practices
- good communication skills
- computer skills
- the ability to meet deadlines
- good customer service skills
- the ability to work as part of a team.

Training

- During your Modern Apprenticeship you would study for SVQ Install, Commission and Maintain Air Conditioning Systems at SCQF Level 6. This usually takes three years.
- You would complete other relevant training, such as manual handling and roof working.
- You would need to keep up to date with new developments in the profession.

Getting On

- With further experience you might progress to air conditioning contracts manager level.
- By taking further qualifications at HNC and beyond, you might progress to Building Services Engineer.

- With experience you could set up your own business.

More Information

- The Engineering Council sets and maintains the standards of the engineering profession in the UK.
- The [Tomorrow's Engineers](#) website has more information on careers in engineering.

Contacts

Air Conditioning and Refrigeration Industry Board (ACRIB)

Website: www.acrib.org.uk

Building Engineering Services Association (BESA)

Tel: 0131 445 5900

Website: www.thebesa.com

Chartered Institution of Building Services Engineers (CIBSE)

Tel: 020 8675 5211

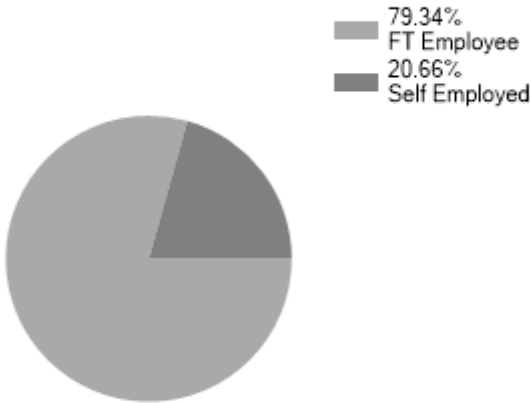
Website: www.cibse.org

Twitter: @CIBSE

Facebook: www.facebook.com/CIBSE

Statistics

Employment Status UK %

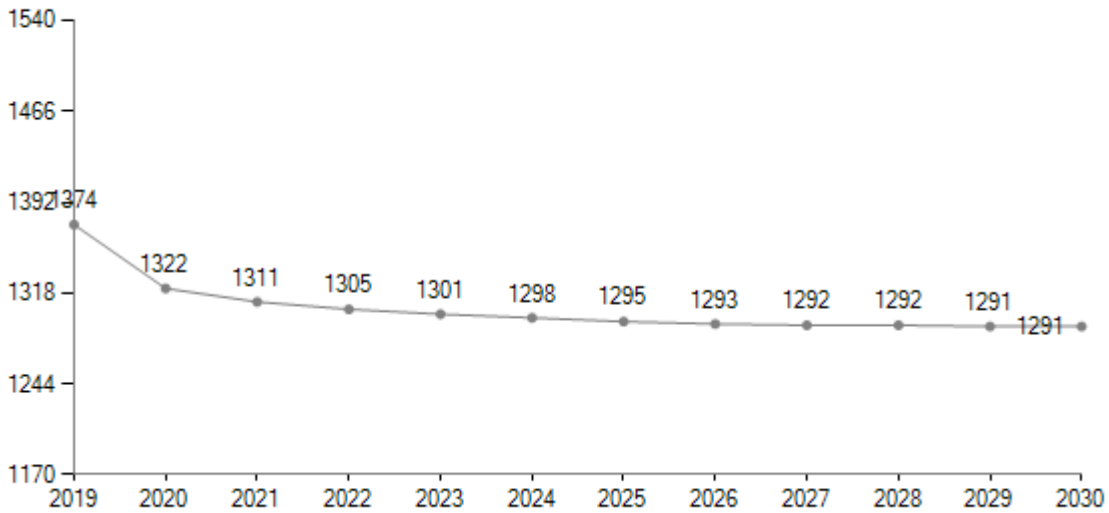


Past Unemployment - Scotland

No Claimant statistics available for Scotland.

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

Predicted Employment in Scotland



LMI data powered by [EMSI UK](#)