

Refrigeration Engineer

Refrigeration engineers design, install, repair and maintain refrigeration equipment in industrial and commercial buildings where food and other perishable goods are stored at a constant low temperature.

The Work

You could be:

- visiting and surveying the premises
- producing an estimate for the cost of constructing and installing the refrigeration system
- planning the layout of pipes and controls
- ordering and buying in materials – copper, plastic and steel
- installing the system with a team of other engineers and craft workers
- diagnosing and fixing faults if equipment does not work properly
- when installation is complete, carrying out quality inspection and testing of the system
- doing regular service checks of the system
- providing functional and technical information to clients.

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. At present the apprentice rate, for those aged under 19 or aged 19 or over and in the first year of their apprenticeship, is £3.90 an hour (1 April 2019).

The starting pay for a qualified refrigeration engineer can be from £20,000 a year. A trained, experienced refrigeration engineer generally earns between £22,000 and £30,000 a year.

Senior refrigeration engineers can earn over £45,000 a year. Overtime and callout charges can increase this. Sometimes the employer will provide a company van.

Conditions

- You could be working in food production units, food sales outlets, hotels and refrigerated transport systems or in hospitals.
- You work at a desk for some aspects of your work but travel to building sites for others.
- You work on installations in hospitals, factories, schools, shops and offices.
- You would work around 40 hours a week. You may work overtime, particularly in summer, and answer emergency calls out of hours.

- You have to wear protective gear: safety goggles, hard hat, safety boots and overalls.
- You may 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 part time 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, refrigeration engineers must hold a current F Gas Certificate. There are three options for individual certification: City and Guilds, BESA accredited course or Logic Certification. These are offered in various locations.
- Many employers look for experience working with ammonia and CO2 systems.
- 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.

What Does It Take

You need:

- practical and technical skills
- the ability to calculate figures and costs
- the ability to read plans and technical drawings
- an understanding of electrics
- good communication skills
- computer skills
- the ability to meet deadlines
- an understanding of health and safety procedures
- to be able to work as part of a team.

Training

- During your Modern Apprenticeship you would study for Scottish Vocational Qualification (SVQ) Install, Commission and Maintain Refrigeration Systems at SCQF Level 6. This usually takes 2-3 years.
- You would need to keep up to date with new developments in the profession.

Getting On

- It is possible to progress to become a building services engineer by taking further qualifications at Higher National Certificate (HNC) and beyond.
- With experience you could set up in business on your own.

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: 020 7313 4900

Email: contact@thebesa.com

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

Institute of Refrigeration (IOR)

Tel: 020 8647 7033

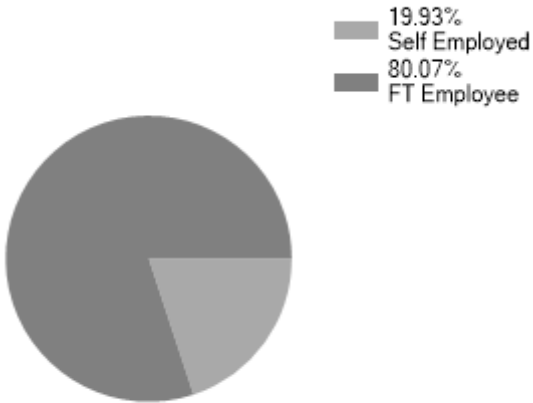
Website: www.ior.org.uk

Twitter: @thecoolinghub

Facebook: www.facebook.com/fantasticfridges?ref=hl

Statistics

Employment Status UK %



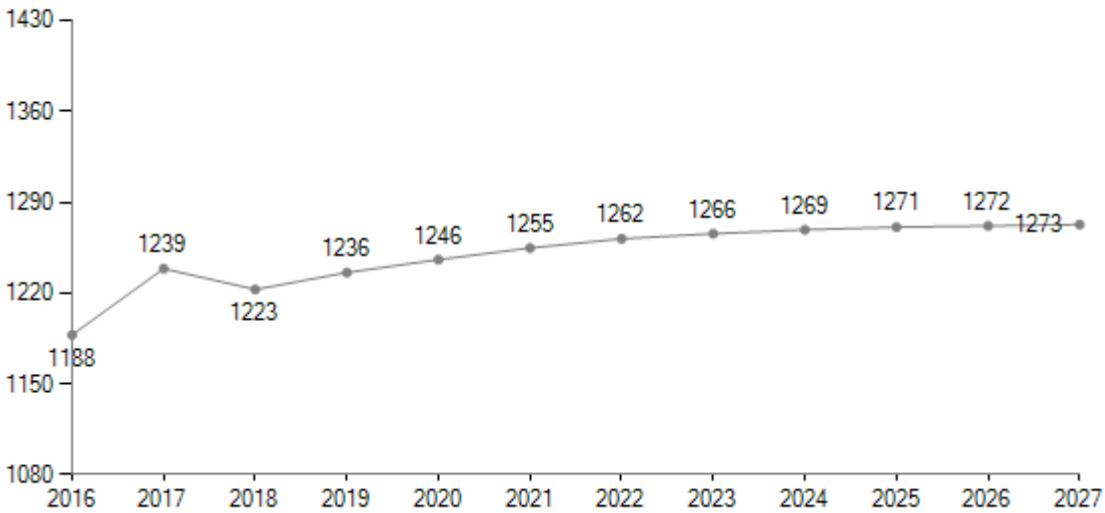
Past Unemployment - Scotland

Date	Unemployed
Dec 2016	0.25%
Dec 2018	0.08%
Mar 2019	0.08%

LMI data powered by [EMSI UK](#)

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

Predicted Employment in Scotland



LMI data powered by [EMSI UK](#)