

Electricity Distribution Worker

Electricity distribution workers are sometimes known as transmission workers. They build, install and maintain the equipment, machinery and distribution systems that supply electricity to homes, industry and commerce.

The Work

They work in one of three specialist jobs at craft level.

- **Electrical, mechanical or control and instrument fitters** work on the equipment in electricity substations.
- **Cable jointers** work on underground cables.
- **Linespersons** work on overhead lines.

Electrical, Mechanical or Control and Instrument Fitter

You could be:

- installing equipment in substations, as well as working on other machinery that controls, protects and monitors the flow of electricity
- maintaining mechanical equipment such as pumps, fans, turbines and valves
- carrying out fault finding and maintenance on control equipment such as panels, circuits and gauges
- carrying out testing and repairs as necessary.

Cable Joiner

You could be:

- installing and maintaining underground power cables, joining lengths of cable together
- connecting underground cables over a range of voltages to overhead supply lines, electricity substations or other parts of the system
- connecting homes, offices, factories and public services to the main electricity supply
- testing and repairing faults caused by damage or wear and tear.

Linesperson

You could be:

- building the overhead distribution lines which are supported by wooden poles or steel pylons
- joining and splicing cables and conductors
- testing, maintaining and repairing lines and circuits
- working at heights using specialist equipment and safety harnesses.

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 electricity distribution workers on completion of their apprenticeship is usually around £24,000 a year. With experience salaries can rise in the region of £40,000 and £50,000 a year.

Conditions

- Conditions vary depending on the job.
- Electrical fitters deal with substations and transmission equipment, so they sometimes work indoors. At other times, they have to work on equipment outdoors.
- Cable jointers are outdoors much of the time, working in trenches where they lay cables. The conditions can be dirty and muddy. They may have to travel to different sites.
- Linespersons have to climb poles and pylons and work at heights, sometimes in difficult weather conditions. They often have to travel, sometimes to very remote places.
- In all cases, the work can be strenuous and involve lifting, bending and carrying.
- You would wear protective clothing, such as a hard hat and safety boots.
- Hours may not be regular. You may have to work shifts and weekends. You will sometimes be on standby for emergencies. You should be prepared to work long overtime hours if there is a major power failure.

Getting In

- You could enter through the Engineering Foundation Apprenticeship (FA), which you can start in S5 and study at school and college. Entry requirements vary between colleges, but you usually need 3 subjects at National 5 including English and Maths. Some colleges also ask for Physics.
- You could enter through a Modern Apprenticeship. Requirements vary, but you normally need at least 3 subjects at National 5, preferably English, Maths and a science or technological subject. Some companies may accept National 4 level.
- Alternatively you could start by taking a qualification in electrical engineering or a similar subject. Relevant courses include a National Certificate (NC), a National Qualification (NQ) or a Higher National Certificate (HNC) or Higher National Diploma (HND).
- Entry requirements range from about 3 subjects at National 4 or 5 for NC and NQ courses to 1-2 Highers for HNC and HND courses. You should normally have English, Maths and at least one science or technological subject.
- You may be able to qualify by other training routes.
- Certain colour vision conditions may affect entry to this job. You may need to take a colour vision test.
- A driving licence would be useful.

Many electricity distribution workers work for national transmission companies or regional electricity distribution companies. Some are employed by large electrical contractors. Job opportunities across the UK are good.

What Does It Take

You need to have:

- a good level of physical fitness
- good practical skills
- a strong sense of responsibility
- an accurate, methodical approach
- a strong awareness of safety issues
- self-motivation.

You need to be able to:

- make decisions
- plan your own work according to agreed timetables
- meet deadlines
- work alone and as part of a team
- solve problems
- pay attention to detail
- work at heights if you want to be a linesperson.

Training

- Training through a Modern Apprenticeship combines on the job and off the job training and leads to Scottish Vocational Qualifications (SVQs) at Levels 2/3.
- If you take a college course first, you would then take a job with an employer and do further training to gain relevant qualifications.
- You must also make sure that you register with a suitable safety passport scheme to prove that you have the knowledge of safety procedures to work on site. For example the Construction Safety Certification Scheme (CSCS) and/or the Basic Electrical Safety Competence for Access, Movement and Egress Scheme (BESC:ACE). See the Energy and Utilities website for more details.
- Following your apprenticeship or college course and after further training with your employer, you can work towards registering as Engineering Technician (EngTech) with the Engineering Council.
- If you do not follow either of the above training routes, you may still be able to achieve EngTech by another approved route. You can check these alternative routes with the Engineering Council or with the relevant professional engineering institution.

Getting On

- After gaining experience, you may be promoted to become a supervisor and perhaps move into management later.
- Engineering Technicians (EngTech) usually work under the general supervision of professional electrical or electronic engineers.
- With further study and training, technicians can progress to become electrical or electronic engineers at the higher levels of Incorporated Engineer (IEng) and Chartered Engineer (CEng).

More Information

The Engineering Council sets and maintains the standards of the engineering profession in the UK. It does so through 35 professional engineering institutions which are Licensed Members of the Engineering Council.

The [Tomorrow's Engineers](#) website has more information on careers in engineering.

The two main electrical power distribution companies in Scotland are [Scottish Power](#) and [Scottish Hydro Electric Power Distribution \(SHEPD\)](#). Visit their websites for careers and recruitment information.

Contacts

Energy and Utility Skills

Tel: 0845 077 9922

Website: www.euskills.co.uk

Twitter: @EUSkills

Engineering Council

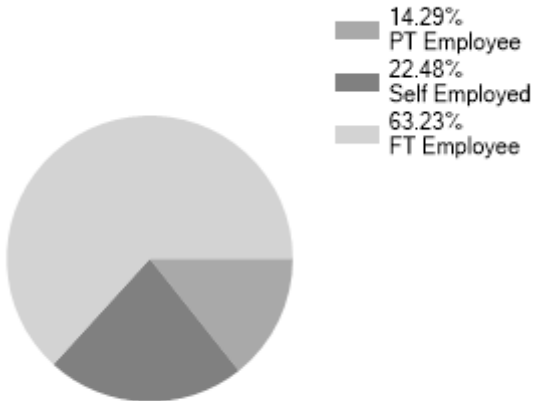
Tel: 020 3206 0500

Website: www.engc.org.uk

Twitter: @EngCouncil

Statistics

Employment Status UK %



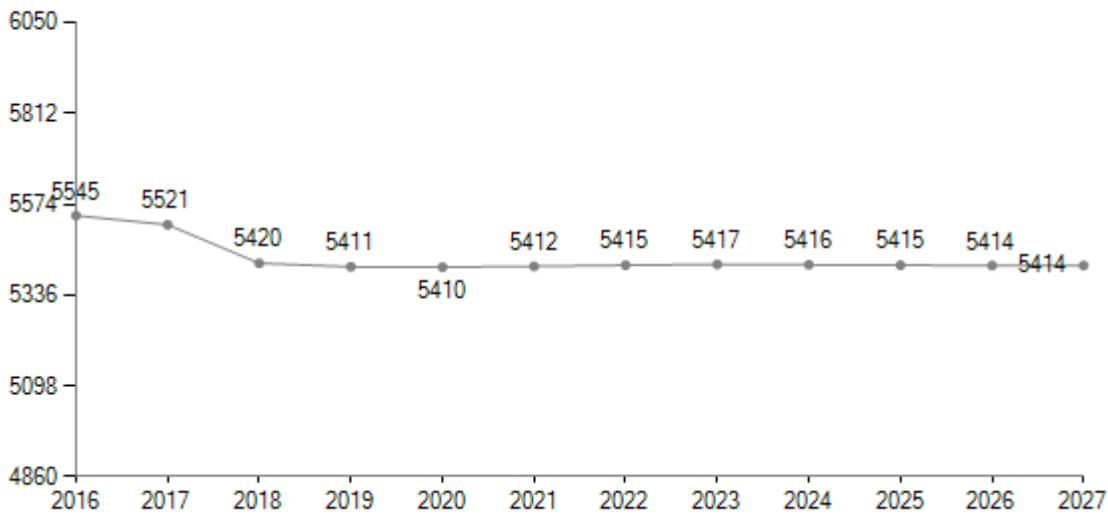
Past Unemployment - Scotland

Date	Unemployed
Dec 2016	5.6%
Jun 2018	3.56%
Sep 2018	3.17%
Dec 2018	2.45%
Mar 2019	2.08%

LMI data powered by [EMSI UK](#)

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Predicted Employment in Scotland



LMI data powered by [EMSI UK](#)