

Electrical Project Engineer

Electrical project engineers working in the offshore industry lead on projects such as production of cabling machines for wind turbines or decommissioning of offshore structures. They manage project documentation, costs and engineering teams and can be involved in design.

The Work

You could be:

- producing project plans, procedures and work instructions
- working on the design and development of equipment for generating and controlling electricity, such as wind turbines
- working on the design and manufacture of the electrical equipment and systems required for use in the decommissioning of offshore structures
- ensuring the quality of parts manufactured meet all required standards
- overseeing testing of all parts before delivery and implementation
- working with electrical and engineering teams carrying out the work
- managing the project budget
- managing timescales and ensuring that deadlines are met
- liaising with health and safety and environmental specialists.

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 electrical project engineers at graduate entry is usually around £20,000 to £30,000 a year. Senior project engineers can earn between £35,000 and £45,000 and lead project engineers can earn £65,000 or more a year.

Conditions

- You might work in a design laboratory, office, workshop or on site for manufacturing or installation.
- You would usually work normal office hours, but if on site, you may need to work some unsociable hours.
- You will have to wear protective clothing such as a hard hat, safety boots and overalls when you are visiting sites.
- You would sometimes travel by helicopter offshore to oil and gas platforms or oil rigs. It can be cold, wet and stormy in these environments.

Getting In

- An electrical or electronic engineering degree (SCQF Level 9-11) is usually preferred, but you may be able to get in with an HNC (SCQF Level 7) or HND (SCQF Level 8) in a similar subject.
- For entry to an HNC or HND course you normally need 1-2 Highers plus some subjects at National 5. For a degree course you need 4-5 Highers including Maths and Physics or a technological subject.
- Studying for a relevant Foundation Apprenticeship (SCQF Level 6) while in fifth and sixth year at school could count towards entry to an HND or degree in a relevant engineering discipline. Entry requirements vary between colleges, but you usually require 3 subjects at National 5 including English and Maths.
- You could do an electrical related Modern Apprenticeship, start as a technician and work your way up a project engineer role.
- You may need to pass a colour vision test. Certain colour vision conditions may affect entry to careers in this branch of engineering.

Electrical project engineers in the offshore industry work for companies involved in oil and gas companies, renewable energy, energy technology development and decommissioning.

What Does It Take

You need to have:

- excellent maths, science and technology skills
- technical and practical ability
- a creative approach to solving problems
- good IT skills
- excellent communication skills
- a good understanding of electrical health and safety issues
- willingness to learn and adapt.

You need to be able to:

- plan and organise projects
- work under pressure
- meet deadlines and keep within budget
- work in a team and motivate others
- work on your own initiative
- collaborate with a wide range of professionals.

Training

- To work offshore, you must also pass an offshore survival course such as the Basic Offshore Safety Induction and Emergency Training Certificate (BOSIET).
- If working offshore you may also undertake CompEx training, which ensures competency in working in potentially explosive atmospheres, such as oil and gas platforms.
- You must keep up to date with new developments throughout your career.

Getting On

- After gaining your HNC, HND or degree and some practical experience with an employer, you can go on to register with the Engineering Council as a professional engineer – either Incorporated Engineer (IEng) or Chartered Engineer (CEng).
- For IEng you need to have either a recognised Bachelor's degree or a recognised HNC or HND plus further study to Bachelor's degree level.
- For CEng you need to have a recognised Bachelor's degree with Honours (SCQF Level 10) plus a recognised Masters degree (SCQF Level 11) (or equivalent), or a recognised integrated Master of Engineering (MEng) degree (SCQF Level 11).
- If you do not have any of the above qualifications, you may still be able to achieve IEng or CEng by other approved routes. You can check these alternative routes with the Engineering Council or with the appropriate professional engineering institution.
- Electrical project engineers who first qualify as IEng can progress to CEng after further study, training and experience. This can open up a wider range of opportunities.
- You may go into teaching and academic research in colleges and universities.
- You might become a consultant offering specialist engineering services.
- There can be good opportunities to work abroad.

More Information

The Engineering Council sets and maintains the standards of the engineering profession in the UK. It does so through 50 professional engineering institutions which are Licensed Members of the Engineering Council.

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

The [My Energy Future](#) website provides information on the energy industry and careers available.

Contacts

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SPE Aberdeen

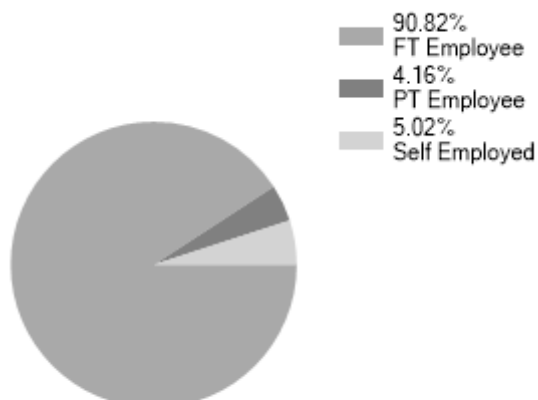
Email: info@spe-uk.org

Website: www.spe-aberdeen.org

Facebook: www.facebook.com/SPE.Aberdeen

Statistics

Employment Status UK %

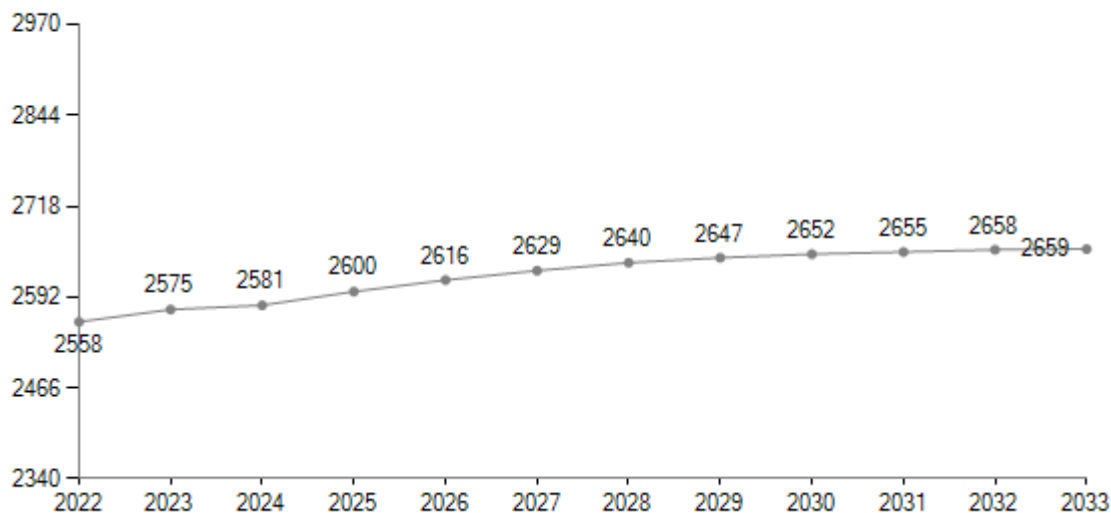


Past Unemployment - Scotland

No Claimant statistics available for Scotland.

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

Predicted Employment in Scotland



LMI data powered by [Lightcast](#)