

Integrity Engineer

Integrity engineers in the offshore industry develop and manage risk assessment and inspection programmes for offshore assets, such as pipelines or machinery used on oil or gas platforms, to ensure that they operate safely and the risk of major accident hazards (MAHs) is minimised.

The Work

You could be:

- developing risk assessment and inspection programmes for assets such as pressure plant, piping and pipelines
- coordinating and implementing cost effective inspection programmes
- ensuring that procedures, standards and plans for safety inspections and risk assessment are followed
- ensuring all assets comply with all relevant legislation, codes and standards
- identifying risks and defects to assets and prioritising repairs
- leading audits and reviews to improve management systems and practices for risks and inspection
- managing performance and budget of contractors carrying out work
- creating reports and presenting data to relevant stakeholders.

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.

Jobs are usually advertised as having a competitive salary, but starting salaries may be around £25,000 to £35,000, rising with experience.

Conditions

- You would usually work in an office, with typical hours of Monday to Friday, 9am – 5pm, although this could vary depending on the company.
- You might be required to travel to other sites.

Getting In

- A degree (SCQF Level 9-11) in an engineering discipline is usually required. If you don't go directly into a degree after school, you could take the route of doing an HNC (SCQF Level 7), an HND (SCQF Level 8) and then move into the final two years of a degree.
- 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 a 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 may decide to go on to complete a relevant postgraduate qualification (SCQF Level 11). A number of Scottish universities, including Aberdeen, Dundee, Heriot-Watt and Robert Gordon, offer courses relating to oil and gas and petroleum engineering.

Integrity engineers in the offshore industry work for companies involved in oil and gas, renewable energy, energy technology development and decommissioning. Jobs are advertised online on websites such as [Oil and Gas Job Search](#) and [Energyjobline](#).

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
- willingness to learn and adapt
- strong decision making skills.

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
- think analytically
- collaborate with a wide range of professionals.

Training

- You would do training courses, or on the job training, that covers regulatory standards and requirements for health and safety and other risk management.
- You must keep up to date with new developments throughout your career.

Getting On

- After gaining your 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.
- 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

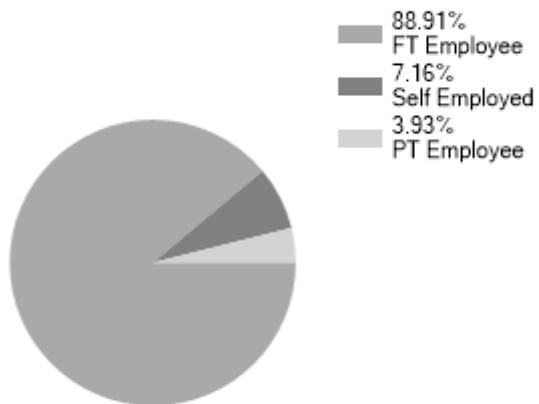
Tel: 01651 873 791

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Statistics

Employment Status UK %

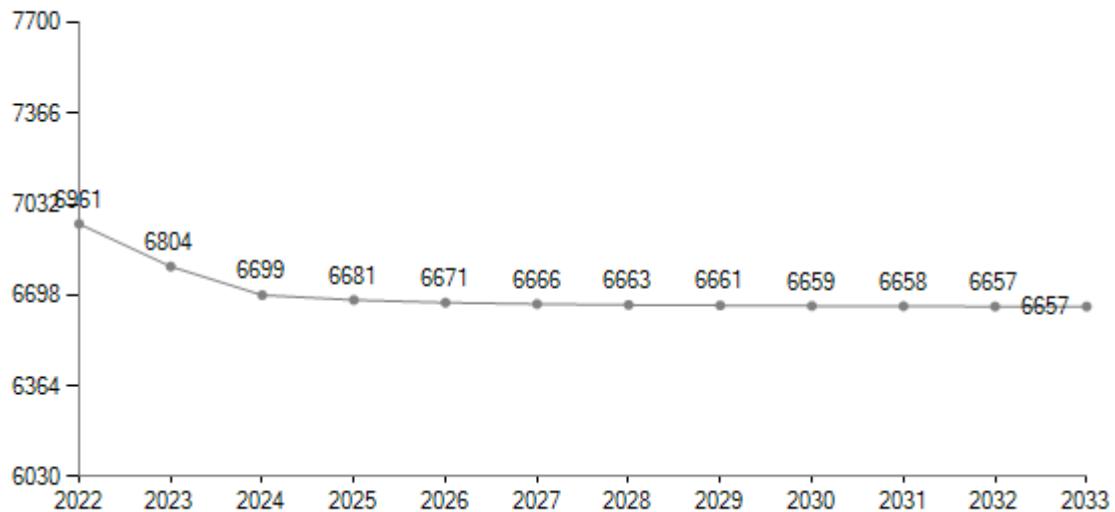


Past Unemployment - Scotland

No Claimant statistics available for Scotland.

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

Predicted Employment in Scotland



LMI data powered by [Lightcast](#)