Reservoir Engineer (Energy)

Reservoir engineers (energy) are involved in the majority of stages of the oil and gas production process. They assess if a field has enough gas or oil to produce for commercial quantities, how much can be extracted and forecast how long it can keep producing.

The Work

You could be:

- producing mathematical models to forecast the amount of oil and gas that could be extracted from a field
- using specialist technology and surveillance data to monitor the quantity and flow of oil and gas being extracted
- proposing improvements to maximise production, such as flow rate enhancement
- overseeing the progress and work of the well operations and liaising with the drilling team
- ensuring that all design and operations meet health, safety and environmental regulations
- liaising with other professionals such as geologists or engineers, as well as contractors, suppliers and clients
- maintaining project documents and writing reports for management.

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.

Starting pay for reservoir engineers is around £25,000 to £30,000 a year. With experience this increases to between £40,000 and £75,000 a year. At senior level the salary could be much higher.

Conditions

- You can work in an office onshore or on a rig or platform offshore. Working offshore is more common in the first 2-3 years of experience. Work is mostly office based after that.
- Onshore hours are mostly regular, Monday to Friday, 9.00am to 5.00pm, but you might occasionally work evenings and weekends.
- Offshore working hours are normally 12-hour shifts, including nights, and you can spend one or two weeks there at a time.
- When offshore you would wear protective clothing and safety equipment such as gloves, boots and a hard hat.
- You have to fly by helicopter between the rig or platform and onshore.
- When offshore, you would live in shared accommodation and meals are provided.

Getting In

- You usually need a degree (SCQF Level 9-11) in petroleum engineering or a related subject, such as geology or chemical engineering.
- The University of Aberdeen offers a BEng Hons (SCQF Level 10) or MEng (SCQF Level 11) in Petroleum Engineering. Entry requirements for the BEng are 4 Highers at BBBB including Maths, Chemistry and Engineering Science or Physics plus National 5 English. Entry requirements for the MEng are 4 Highers at AABB including Maths, Chemistry and Engineering Science or Physics plus National 5 English.
- If you have a degree in a subject like maths, physics or chemical engineering you could study for a postgraduate qualification (SCQF Level 11) in Petroleum Engineering, which is available at Aberdeen and Heriot-Watt universities.
- If you work offshore, which is more common in the first 2-3 years of experience, you must pass a medical examination every 2 years.

Reservoir engineers work mostly for oil and gas companies and renewable energy companies. Jobs are usually advertised on specialist sites such as Oil and Gas Job Search and Energyjobline.

What Does It Take

You need to have:

- an analytical mind
- good problem solving skills
- initiative and self-reliance
- good verbal and written communication skills
- excellent planning and organisational skills
- a responsible attitude to health and safety
- excellent IT skills.

You need to be able to:

- lead and work within a team
- work well under pressure
- work on a range of projects and multi-task
- keep up to date with technology and developments in the sector.

Training

- Training is usually on the job and involves spending some time on offshore installations and observing people carrying out different related jobs.
- To work offshore, you must also pass an offshore survival course such as the Basic Offshore Safety Induction and Emergency Training Certificate (BOSIET).
- You must update your skills and knowledge throughout your career.

Getting On

- With further training and practical experience you can register with the Engineering Council as a

professional engineer – Incorporated Engineer (IEng) or Chartered Engineer (CEng).

- For IEng you need to have a recognised Bachelor's degree (SCQF Level 9) or a recognised HNC (SCQF Level 7) or HND (SCQF Level 8) 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 (or equivalent), or a recognised integrated Master of Engineering 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. Check the website of the Engineering Council for more information.
- You could move on to be a senior engineer or manager.
- You might become a self-employed engineering consultant.
- There are opportunities to work abroad and this may be necessary for career advancement.

More Information

The My Energy Future website provides information on the energy industry and careers available.

Contacts

Offshore Energies UK (OEUK)
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Website: oeuk.org.uk
X: @OEUK_
Facebook: www.facebook.com/OffshoreEnergiesUK

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Statistics

Past Unemployment - Scotland

No Claimant statistics available for Scotland.

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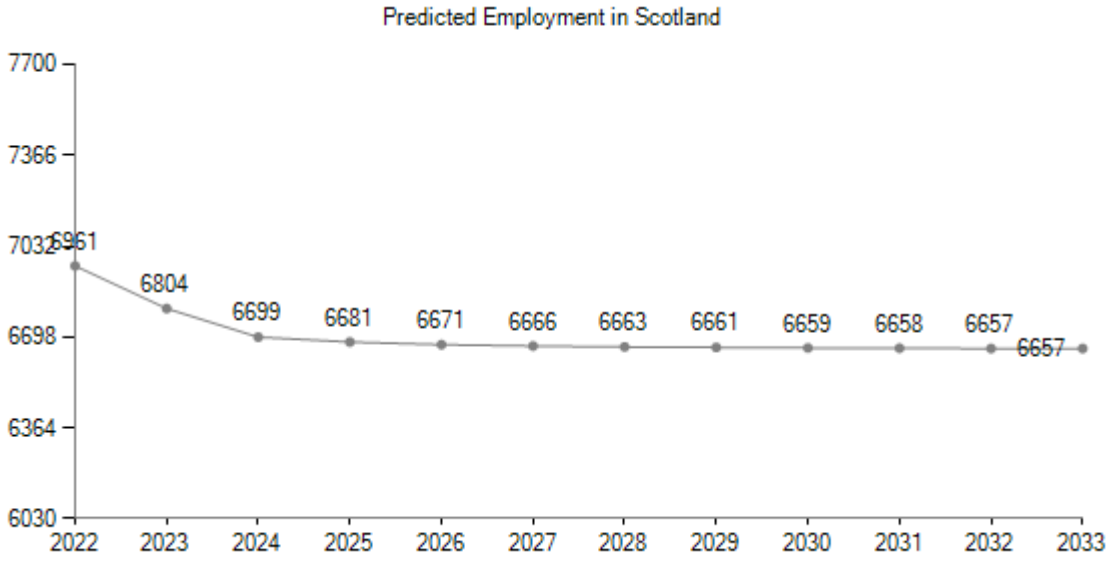

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