# **Petroleum Engineers**

SOC: 17-2171 • Career Profile Report

#### ■ Key Facts

**\$141,280**Median Salary

19,600 Employment +1.0%
Growth Rate

### ■ Requirements & Salary Range

Education: Bachelor's degree

#### ■ Automation Risk Assessment

Low Risk - 17.0% probability of being automated in the next 10-20 years.

This job is relatively safe from automation due to its creative, social, or complex problem-solving requirements.

#### **■■** Work-Life Balance

7.2/10 - Good work-life balance

# **■** Personality Fit (RIASEC)

Higher scores indicate better personality fit for this career type.

Realistic	8.2/10	Investigative	8.8/10
Artistic	6.4/10	Social	5.2/10
Enterprising	5.8/10	Conventional	6.6/10

### **■** Top Skills Required

Analytical skills, Communication skills, Interpersonal skills, Math skills, Problem-solving skills

#### √ Strengths

- High Demand
- Flexible Work
- · Continuous Learning

#### ■ Challenges

- Burnout Risk
- Rapid Technological Change

# **■** What They Do

Petroleum Engineers typically perform the following tasks: • Specify and supervise well modification and stimulation programs to maximize oil and gas recovery. • Monitor production rates, and plan rework processes to improve production. • Maintain records of drilling and production operations. • Analyze data to recommend placement of wells and supplementary processes to enhance production. • Assist engineering and other personnel to solve operating problems. • Direct and monitor the completion and evaluation of wells, well testing, or well surveys. • Develop plans for oil and gas field drilling, and for product recovery and treatment. • Assess costs and estimate the production capabilities and economic value of oil and gas wells, to evaluate the economic viability of potential drilling sites. • Confer with scientific, engineering, and technical personnel to resolve design, research, and testing problems. • Interpret drilling and testing information for personnel. • Coordinate activities of workers engaged in research, planning, and development. • Write technical reports for engineering and management personnel. • Evaluate findings to develop, design, or test equipment or processes. • Test machinery and equipment to ensure that it is safe and conforms to performance specifications. • Assign work to staff to obtain maximum utilization of personnel. • Simulate reservoir performance for different recovery techniques, using computer models. • Design and implement environmental controls on oil and gas operations. • Supervise the removal of drilling equipment, the removal of any waste, and the safe return of land to structural stability when wells or pockets are exhausted. • Inspect oil and gas wells to determine that installations are completed. • Coordinate the installation, maintenance, and operation of mining and oil field equipment.

Generated by StartRight • Data from U.S. Bureau of Labor Statistics & O\*NET Source: https://www.bls.gov/ooh/architecture-and-engineering/petroleum-engineers.htm