I explore the world's energy resources.

I protect the environment.

I am the future.

I am a petroleum engineer.



# What's a petroleum engineer?

Petroleum engineers locate, recover, and maintain the world's oil and gas supplies. They are the innovators who use cutting-edge technology to create new methods of discovering and drilling for oil. Although there are various job descriptions, petroleum engineers all serve one function—to provide the world with energy, while safeguarding the environment for future generations.

Most careers involve a combination of office-based and advanced, computer-oriented technology work. Plus, petroleum engineers typically have numerous opportunities to travel across the globe for a variety of work-related projects.

As the demand for new energy processes and resources continues to increase, so does the demand for petroleum engineers. And with many current engineers approaching retirement, there is opportunity for fast advancement.

As many as 38% more petroleum engineers are needed to find the energy the world requires now and in the future.

Starting salaries for engineering school graduates are among the highest of any field. Entry-level petroleum engineers often receive lucrative job offers and signing bonuses.

The world will always need energy. Petroleum engineers must answer the call to find innovative technologies and new resources to meet the increasing demands for energy. Petroleum engineers will lead the way into the future and will have the opportunity to truly make a difference. This is an exciting and unique time to join the industry.

### Where they work



## What you can do now to prepare for your career

#### Practical steps for secondary students

- 1. Always strive to get good grades throughout high school.
- 2. Take math, chemistry, physics, computer science, economics, and other natural science classes, when offered.
- 3. Seek college preparatory, advanced placement, and dual-enrollment programs.
- 4. Research universities that offer a bachelor of science degree in petroleum engineering (university listings available at Energy4me.org).
- 5. Take note of admission application deadlines and apply when appropriate.
- 6. Look for scholarships at Energy4me.org.
- 7. Have your school request a petroleum engineer for a career fair or classroom speaker at Energy4me.org.
- 8. Search for summer internships that will give you hands-on experience.

### Areas of specialty



# Are you a future petroleum engineer?

- 1. Do you love nature (oceans, jungles, and deserts)?
- 2. Do you want to travel?
- 3. Do you play computer or video games?
- 4. Do you like working with technology?
- 5. Are math and science your favorite courses?
- 6. Do you have a creative and imaginative personality?
- 7. Do you have good communication skills?
- 8. Do you want to experience financial freedom and security?

### Quick facts about energy

Energy is a fundamental aspect of the universe. Petroleum powers machinery and technology that warms and cools homes, cooks food, and provides entertainment.

More than 80% of oil is used to create fuel for vehicles, maritime, and aviation transportation.

In addition, oil serves as a raw material for the production of plastics, rubber, nylon, spandex, detergents, pharmaceutical drugs, clothing, cosmetics, perfumes, paints, bubble gum, and more.

#### What's the future of oil?

The demand for safe, affordable, and clean energy throughout the world is growing dramatically. Currently, about 86 million barrels of oil are used per day—40,000 gallons (151,516 litres) every second. And it is projected that there will be a 50-60% growth in demand for energy worldwide in the next 25 years.

Oil will be the predominant fuel for the foreseeable future. Advanced technologies are finding new oil and gas deposits and recovering more resources from existing wells. And oil and gas companies are major investors in alternative energy sources.

# Top 10 reasons to become a petroleum engineer

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- 3. experience other cultures and make \_\_\_\_\_
- 4. earn lots of \_\_\_\_\_
- 7. are consistently gaining \_\_\_\_\_
- 8. explore the vast \_\_\_\_\_
  - 9. have \_\_\_\_\_ while working
  - 10. work with state-of-the-art \_\_\_\_\_

## NO N

- 1. get to \_\_\_\_\_the world
- **3** 2. have a life full of \_\_\_\_\_
  - provide energy to the\_\_\_\_\_
  - 6. protect the \_\_\_\_\_

Answers available on Energy4me.org

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		3						
4							5	
			6					
		7						
			8					
	9							
		10						



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