What Do Petroleum Engineers Do?

Petroleum engineers design and manage drilling, production, and injection operations around the world. Their work may take place in the Arctic, jungles, oceans, or across the Continental U.S. While it often involves production of oil or natural gas, the ongoing energy transition means that the role of petroleum engineers is expanding to include subsurface CO2 sequestration, solution mining of valuable minerals, accessing geothermal energy, or creating subsurface reservoirs for hydrogen storage.

Petroleum engineers combine fundamentals of math, physics, and geology along with modern engineering principles, and it's this combination of disciplines that sets petroleum engineers apart from other engineers.

LSU graduates are known for being well trained to address the real-world challenges that come with designing complex subsurface systems. They learn from world-class faculty members who average more than seven years industry experience. The curriculum includes a new sequence in modern data sciences, and provides the unique opportunity to obtain a concentration in carbon capture, utilization, and storage (CCUS).

PERTT Lab

The Petroleum Engineering Research Training & Testing Laboratory (PERTT Lab) is a one-of-a-kind facility with six wellbores and the necessary industrial equipment to operate them in a controlled field-scale laboratory. All petroleum engineering students take a laboratory on well control at the PERTT Lab, allowing them to test their mastery on real equipment once they have trained on computer simulators. LSU students can also apply to the PERTT Lab’s Student Internship Program, to earn extra money while building the practical skills that can be gained only through hands-on experience in this type of environment.

PROGRAM FACTS

2020–2021 Enrollment: 251 Students

Common Minors: Geology, Business Administration, Technical Sales

Student Organizations:
SPE—Society of Petroleum Engineers
AADE—American Association of Drilling Engineers
ARMA—American Rock Mechanics Association

GRADUATE STARTING SALARIES

Median full-time salary info for LSU graduates in May 2022

- Middle 50%
  - $75,500
  - $112,500

- Median Salary
  - $85,000

Undergraduate Advisor:
Fred Thurber, Instructor
Email: fthurbe@lsu.edu
Phone: 225-578-6058

CAREER OPTIONS

Reservoir Engineer
Drilling Engineer
Natural Gas Engineer
Production Engineer
CCUS Engineer
Natural Gas Engineer
Well Log Analyst

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