



PETROLEUM ENGINEERING

The modern world requires vast amounts of energy and petrochemical products (such as plastics) in order to function on a daily basis. Students in the Craft & Hawkins Department of Petroleum Engineering learn how to use science and engineering principles to find and produce the natural gas and oil resources that make everyday life possible.

What Do Petroleum Engineers Do?

Petroleum engineers design and manage drilling and production operations around the world wherever oil and natural gas is found. This may take place in the Arctic, jungles, oceans, or even in shale formations here in the United States. Petroleum engineers thoroughly study geologic and engineering data in order to design drilling and production operations that maximize production rates and reservoir recovery.

As a petroleum engineer, you might move to field, district, area, staff, and chief petroleum engineering positions. Alternatively, you might prefer to advance through such management posts as supervisor, superintendent, manager, and president/CEO. Once you acquire industry experience, you might want to work as a consultant or enter the oil business on your own.

PERTT Lab

LSU Petroleum Engineering graduates are known for being well trained to solve real-world industry problems. LSU houses the Petroleum Engineering Research & Technology Transfer Lab (PERTT Lab), a one-of-a-kind facility where our students gain hands-on experience to control a potential blowout and engage in modern production engineering practices.

We believe it's a really important and unique resource that we have here at LSU. We're the only school in the United States that offers and requires hands-on training in well control and understanding hydrostatics and pressure control in wells using actual wells.

John Rogers Smith, retired LSU faculty member

PROGRAM FACTS

2020–2021 Enrollment: 251 Students

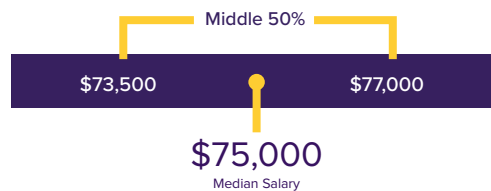
Common Minors: Geology, Business Administration, Technical Sales

Student Organizations:

SPE—Society of Petroleum Engineers
AADE—American Association of Drilling Engineers
SPWLA—Society of Petrophysicists & Well Log Analysts
ARMA—American Rock Mechanics Association

GRADUATE STARTING SALARIES

Median full-time in field salary info for graduates of the last three years



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

CAREER OPTIONS

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

Petroleum Engineering CURRICULUM OVERVIEW

YEAR 1	YEAR 2	YEAR 3	YEAR 4	LEGEND
Introduction to Petroleum ENGR	Reservoir Rock Properties	Reservoir Dynamics	Senior Project I	Major-specific Engineering
Physics I: Particle Mechanics	Reservoir Fluid Properties	Drilling Engineering	Senior Project II	Other Engineering
General Chemistry I	Statistics and Data Visualization for Petroleum Engineers	Petroleum Field Operations	Reserve Estimation and Reservoir Management	Science
General Chemistry II	Economic Aspects of Petroleum Production	Computational Methods and Data Analytics in Petroleum Engineering	Prevention of Oil and Gas Well Blowouts	Math
General Chemistry Lab	Well Logging	Petroleum ENGR Aspects of Subsurface Geology	Drilling Fluids Lab	General Education
General Geology: Physical	Statics	Well Performance and Production	Reservoir Mechanics Lab	
Physical Geology Lab	Fluid Mechanics	Rock and Fluid Properties Lab	Petroleum ENGR Design	
Calculus I	Physics II: Fluids, Thermodynamics, Waves, and Modern Physics	Thermodynamics	Petroleum ENGR Design	
Calculus II	Physics III: Fields: Gravity, Electricity, and Magnetism	Mechanics of Materials (Strengths)	Petroleum ENGR Design	
General Ed: English Comp I	Elementary Differential Equations	Geology Elective	Technical Elective	
General Ed: Life Science	Economic Principles	General Ed: English Comp II	General Ed: Social Sciences	
		General Ed: Arts	General Ed: Humanities	
			General Ed: Humanities	
			General Ed: Humanities	