Energy Engineering (B.S.)

John and Willie Leone Family Department of Energy and Mineral Engineering



Energy engineers solve problems and design systems for the production, processing, storage, distribution, and utilization of energy. By applying fundamental principles, energy engineers improve efficiencies in renewable and sustainable energy systems, including wind, solar, and hydropower; discover better ways to make and utilize fuels, such as fossil fuels, biofuels, and hydrogen; and harness electrochemistry to design larger energy storage systems, among other things.

PennState
College of Earth
and Mineral Sciences

Visit: www.ems.psu.edu/academics/find-program-study/energy-engineering-bs







Overview

The undergraduate program in energy engineering is designed to reflect the growing demand for energy in society and to find sustainable solutions for this need. Our graduates are well-equipped to become:

- Valuable contributors in addressing society's energy needs and demands
- Successful leaders in advancing the technology and management of energy
- Innovators and entrepreneurs in the energy sector
- Educators, practicing engineers, and national leaders on energy and associated environmental, health and safety, and policy and economics issues

You might be a good fit if...

- You aspire to be a lifelong learner, problem-solver, and leader in the energy industry.
- You want to be part of some of the fastest growing sectors of industry in the nation.
- You excel at math, science, and engineering and seek a broad overview of energy fields.
- You're interested in a well-rounded education on all facets of the energy market, including renewable energy.

Internships and scholarships

The College of Earth and Mineral Sciences awards more than $2.5 million annually, including more than $310,000 exclusively for students interested in the department Energy Engineering is housed in.



Transitioning to renewable energy is an essential part of the world's strategy for the decarbonization, as well as decentralization of energy. Being an energy engineer aided my knowledge on different energy technologies such as wind, solar, and battery systems while gaining a holistic sense of the energy grid and market.

~ Mufaddal Gheewala

Clubs and activities

- Association of Energy Engineers
- Engineers for a Sustainable World
- Engineers Without Borders

Options

- Students can obtain a B.S. and M.S. within five years

Why choose Penn State?

The program is designed to train students to be lifelong learners, problem solvers, and energy industry leaders. The educational opportunities are sufficiently flexible, broad, and diverse to enable students to tailor their educational experience to particular interests, background, and expected role in society.

$68K Starting salary for graduates

80% Job placement at graduation

7 Meets 7 of 17 UN sustainability goals