Bachelor's Degree

General Engineering

ALTERNATIVE ENERGY AND POWER GENERATION TRACK

hazleton.psu.edu

PENNSTATE Hazleton

1855

A High-Tech Career that Makes a Difference

Are you excited about "green" technologies? Would you like to be a leader in guiding the energy industry toward a more environmentally friendly future? If you'd like to pursue a career in the alternative and renewable energy fields, consider earning a four-year degree in General Engineering, Alternative Energy and Power Generation track, at Penn State Hazleton.

In this program, you can prepare for a career in the growing and exciting fields of alternative and renewable energy and the power generation industry. As an engineer in these industries, you will help research, improve, and promote earth-friendly energy solutions and play a critical role in helping to conserve our natural resources.

Career Possibilities

Engineering can be a financially rewarding career choice. According to the U.S. Bureau of Labor Statistics (BLS), starting salaries for engineers are among the highest of those for all college graduates. (The BLS notes that a bachelor's degree is required even for most entry-level jobs in the field). Employment in the engineering sector is expected to grow by 11 percent overall by 2018, with certain specialties predicted to have a growth rate as high as 31 percent.

Graduates with a bachelor's degree in General Engineering with a specific focus on alternative energy and power generation may find employment in positions such as:

—development engineer
—engineer
—manufacturing engineer
—process engineer
—product engineer
—system design engineer

If you are analytical, detail oriented, and excited by the prospect of playing an important role in the future of the energy industry, a career as an engineer with a specialty in alternative energy and power generation may be for you. Engineers in the power and energy fields must have a critical understanding of the environmental, social, and economic aspects of the power generation industry. This program will help you attain the skills and knowledge needed to excel in this field.

Program Overview

This program is designed to help you:

—gain employment with a government or industry employer in the alternative/renewable energy or power generation field;
—assume an increasing level of responsibility and leadership in your professional career;
—recognize and understand global, environmental, social, and ethical contexts of your work; and
—prepare to commit to lifelong learning to enhance your career and respond to changing social and technical environments. This may include pursuing an advanced degree or certificate.

Program Requirements

The B.S. in General Engineering is an eight-semester degree program culminating in a two-semester senior design course sequence consisting of a project based largely on student interest and faculty input.

General Education: 45 credits
(27 of these credits are included in requirements for the major)

Major requirements: 109 credits
This includes 71 credits required for all engineering majors, plus 38 credits specific to the track.

Total degree requirements: 127 credits

For a complete curriculum outline, visit:
hazleton.psu.edu/Academics/GenEngin.htm.

"In my junior year, I joined the GE Energy Steam Turbine team through the Penn State Co-op program and received the Co-op Student of the Year award. Now, I am working at GE Energy as a wind turbine performance engineer. My career has a strong foundation thanks to opportunities at Penn State."

— **Dhaval Bhalodia,** Schreyer Scholar; B.S., General Engineering, Energy Track, Aerospace Engineering, 2008; Wind Turbine Performance Engineer, General Electric Company

Admission Requirements

An applicant must have four units of high school English (including one unit each in composition and literature); five units in any combination of foreign language, social studies, arts, and humanities; three units of science; and three units of math, consisting of a combination of algebra, geometry, and trigonometry. A high school diploma or equivalent and satisfactory Scholastic Aptitude Test (SAT/SAT1) scores are also required. Application forms are available from high schools or any Penn State campus, and on the web at **admissions.psu.edu**.

[Student Testimonials to come]

Penn State Hazleton

Located approximately two hours from New York City and Philadelphia in northeast Pennsylvania, Penn State Hazleton is a picturesque 104-acre campus serving the educational needs of both traditional and returning adult students. The campus offers both residential and off-campus housing.

At the Hazleton campus, you will benefit from the vast resources of an internationally recognized university in an intimate setting where personal interaction with faculty and other students can help you succeed. The opportunity to work closely with our accomplished faculty is what makes the academic experience special.

The campus has state-of-the-art facilities and computer technology to help students learn and grow. Each student receives a personal Internet account for e-mail and web access. Students also have access to an extensive library complete with videotapes, reference materials, and a study area. Recreation and fitness facilities include a weight room and Olympic-size pool.

For More Information

For more information about the Penn State Hazleton bachelor's degree program in General Engineering with the Alternative Energy and Power Generation track, contact:

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Hazleton PA 18202

570-450-3087
wxg3@psu.edu

Program website:
hazleton.psu.edu/Academics/GenEngin.htm

Campus website:
hazleton.psu.edu

For enrollment and financial aid information, contact:

Admissions: 800-279-8495, ext. 3142, or 570-450-3142
Financial Aid/Scholarships:
800-279-8495, ext. 3163, or 570-450-3163

For more information on accreditation of professional engineers, contact:

Accreditation Board for Engineering and Technology
111 Market Pl., Suite 1050
Baltimore, MD 21202
410-347-7700
abet.org

For information about Pennsylvania licensing requirements for engineers, contact:

State Registration Board for Professional Engineers, Land Surveyors and Geologists
P.O. Box 2649
Harrisburg, PA 17105-2649
717-783-7049
ST-ENGINEER@state.ps.us

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