Graduate Certificate in Wind Energy

PennState World Campus

A world of possibilities. Online.

Online Learning Through Penn State World Campus

In 1892, Penn State founded one of the first correspondence courses in the United States; in 1998, we were one of the first major accredited universities to begin providing online education. Since then, we have been committed to ensuring that our students have access to a quality academic experience, even when they have job and family obligations to fulfill.

Penn State World Campus courses have fixed start and end dates as well as regular deadlines for course work submissions. Your learning experience will be enhanced by frequent faculty interaction, access to instructional resources, and dedicated support services. Learn more about the resources, opportunities, and advantages available to you as a World Campus student at **worldcampus.psu.edu/about-us**.

Graduate Certificate in Wind Energy

Projected growth in the global wind industry indicates a need for educated professionals who can consider wind energy projects as a system, taking into account the influence of wind resource and external factors that impact project development. As wind becomes a more common source of electric power generation, companies will need professionals with a broad understanding of the wind project development process as well as technical depth in turbine technology and the science of properly siting wind turbines.

The Graduate Certificate in Wind Energy, offered online through Penn State World Campus, provides you with a relevant wind energy curriculum taught by leading faculty. This certificate is an excellent credential to add to your résumé and can provide you with a skill set valued across the wind energy industry.

If you are looking to get involved in or lead advances in the wind energy industry, this certificate program offers an ideal learning experience. Whether you are a current or aspiring practitioner in the field, the certificate program can provide you with the opportunity to improve the skills you need to further

your career. Students will come into the certificate program with various undergraduate degrees; however, applicants are expected to have taken college-level courses in fluid mechanics, statics, and dynamics for entry into this graduate certificate program.

As a student in this three-course, 9-credit program, you can prepare to lead wind energy development projects by addressing such topics as:

- the interconnected design elements of a modern horizontal-axis wind turbine and how its design relates to site-specific implementation
- aerodynamic theory and computational methods used in the design of state-of-the-art wind turbines
- the use of design and analysis software common to the industry
- optimization of a wind project site from performance, logistical, financial, and environmental perspectives

Curriculum

To earn this certificate, you must successfully complete the following courses:

AERSP 583—Wind Turbine Aerodynamics (3 credits)

Analysis of wind turbine performance, aeroacoustics, and loads; turbine selection for site-specific application.

AERSP 880—Wind Turbine Systems (3 credits)

Wind turbine technology and the critical elements of turbine system design.

AERSP 886—Engineering of Wind Project Development (3 credits)

An overview of the wind project development process and technical considerations for onshore and offshore applications.

To learn more about the Graduate Certificate in Wind Energy, please visit **worldcampus.psu.edu/wind**.

Begin Your Application Today

To pursue the Graduate Certificate in Wind Energy, complete an online application by clicking on the "Apply Now" button at **worldcampus.psu.edu/wind**.

Did You Know?

- The wind energy certificate can be completed in a year.
- This certificate is taught by highly regarded faculty from Penn State's College of Engineering.
- Online courses involve frequent interactions with students and faculty.
- Penn State credits and degrees earned online are identical to those earned by resident students.

Contact Us

Program Questions

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Admissions Questions

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