

Undergraduate Certificate in Weather Forecasting



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World Campus

**A world of possibilities.
Online.**

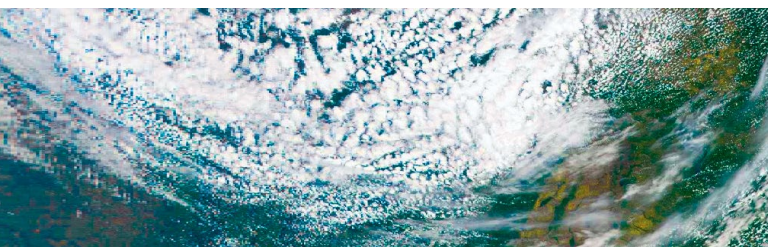
Undergraduate Certificate in Weather Forecasting

Weather impacts nearly every aspect of our daily lives, yet for many consumers, understanding of the weather ends with using a mobile app or watching the forecast on the local news. Those who are able to understand the weather can have a much clearer idea of how weather could impact their lives.

The Undergraduate Certificate in Weather Forecasting, offered online through Penn State World Campus, can demystify the weather to provide you with knowledge of atmospheric structure and processes. You should then be able to comprehend what controls the evolution of storms and why weather forecasts are not always certain. Upon completion of the program, you should be able to create your own weather forecasts by leveraging the same programs and tools used by professional weather forecasters.

As a student in this four-course, 12-credit program, you can learn to:

- › interpret publicly available weather data and analyze ongoing weather events
- › forecast weather variables such as temperature, wind speed, or precipitation and apply your predictions to everyday situations
- › use industry tools and proper terminology to communicate current and future weather conditions to others
- › develop conceptual models describing the evolution and impact of significant weather events around the globe



Curriculum

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

METEO 101: Understanding Weather Forecasting (3 credits)

Fundamental principles of synoptic and physical meteorology, satellite and radar imagery, and data analysis in the setting of mid-latitude weather forecasting.

METEO 241: Fundamentals of Tropical Forecasting (3 credits)

Applying atmospheric principles to the tropics, with an emphasis on the development, structure, prediction, and destructive impact of hurricanes.

METEO 361: Fundamentals of Mesoscale Weather Forecasting (3 credits)

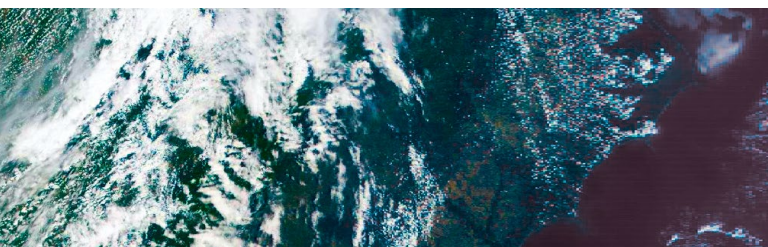
Applying atmospheric principles to small-scale weather systems, with an emphasis on the conceptual modeling and short-range prediction of severe thunderstorms.

METEO 410: Advanced Topics in Weather Forecasting (3 credits)

Exploring and applying advanced principles of forecasting and atmospheric science to real-time, short-range weather predictions at a series of selected cities across the contiguous United States.

To learn more about the Undergraduate Certificate in Weather Forecasting, please visit:

worldcampus.psu.edu/meteo





Begin Your Application Today

Learn more about applying to pursue the Undergraduate Certificate in Weather Forecasting by clicking the “How to Apply” button at: worldcampus.psu.edu/meteo

Did You Know?

- › Our weather forecasting faculty are nationally recognized leaders in meteorology education.
- › The weather forecasting certificate can be completed in a little over a year.
- › Certificate course work is conceptually rigorous, yet written with the layperson in mind.
- › The Penn State meteorology department has more than 75 years of experience.



Online Learning through Penn State World Campus

In 1892, Penn State founded one of our nation's first correspondence courses; in 1998, we were one of the first major accredited universities to provide online education. We are committed to ensuring that you have access to a quality academic experience, even when you have job and family obligations to fulfill.

Weather forecasting courses have fixed start and end dates, as well as regular deadlines for course work submissions. Beyond the certificate's curriculum, your learning experience is enhanced by frequent faculty interaction, access to instructional resources, and dedicated support services. Learn more about the resources, opportunities, and advantages you have as a World Campus student at:

worldcampus.psu.edu/about-us

Contact Us

Program Questions

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